



NAWCADLKE-75098005
22 APRIL 1999

USER'S LOGISTICS SUPPORT SUMMARY (ULSS)

CONSOLIDATED AUTOMATED SUPPORT SYSTEM (CASS) AN/USM-636(V)

WARNING: This document contains technical data, the export of which is restricted by the Arms Export Control Act (Title 22, U.S.C. et seq.) or Executive Order 12470. Violations of these export laws are subject to severe criminal penalties.

Distribution authorized to U.S. Government agencies and their contractors for Administrative or Operational use as determined on 22 APR 1999. Other requests for this document shall be referred to the Commander, Naval Air Warfare Center, Aircraft Division, Hwy 547, Lakehurst, NJ 08733-5108.

DESTRUCTION NOTICE: Destroy by any method that will prevent disclosure of contents or reconstruction of the document.

Prepared by: _____ Date: _____
M. BRUNO, CASS ULSS MANAGER, LOGISTICS
NAWCADLKE, CODE 3.1.4.4

Approved by: _____ Date: _____
M. DOONEY-KIZEIK, DEPUTY ASST PROGRAM MANAGER, LOGISTICS
NAWCADLKE, CODE 3.1.4.4

TABLE OF CONTENTS

<u>PARA</u>	<u>TITLE</u>	<u>PAGE</u>
1.0	INTRODUCTION.....	1
2.0	FUNCTIONAL DESCRIPTION.....	1
3.0	MAINTENANCE CONCEPT.....	5
3.1	ORGANIZATIONAL LEVEL (O-LEVEL) MAINTENANCE.....	6
3.2	INTERMEDIATE (I-LEVEL) MAINTENANCE	6
3.3	DEPOT LEVEL (D-LEVEL) MAINTENANCE	7
3.4	SYSTEM TESTING	7
4.0	SITE ACTIVATION/DELIVERY SCHEDULE	9
5.0	INTERIM SUPPORT	9
5.1	INTERIM SUPPORT LIST (ISIL)	10
5.2	TECHNICAL SUPPORT.....	10
6.0	LOGISTIC SUPPORT MANAGEMENT TEAM	11
7.0	SUPPLY SUPPORT REQUIREMENTS	11
7.1	PROVISIONING.....	11
7.2	ALLOWANCE PARTS LISTS.....	12
8.0	TECHNICAL DOCUMENTATION.....	12
9.0	SUPPORT EQUIPMENT (SE).....	14
10.0	TRAINING REQUIREMENTS.....	16
10.1	SECURITY REGULATIONS AND CLEARANCES	17
11.0	PERSONNEL	17
12.0	COMPUTER RESOURCES/SOFTWARE SUPPORT	18
13.0	MAINTENANCE FACILITY REQUIREMENTS	18
14.0	SPECIAL OR NON-STANDARD REQUIREMENTS.....	21

TABLE OF CONTENTS - CONTINUED

TABLES

<u>TABLE</u>	<u>TITLE</u>	<u>PAGE</u>
TABLE 1.	CASS CONFIGURATIONS REFERENCE DATA LIST- (LRIP)	4
TABLE 2.	CASS CONFIGURATIONS REFERENCE DATA LIST- (VECP)	4
TABLE 3.	KEY GOVERNMENT PERSONNEL.....	11
TABLE 4.	CASS TECHNICAL MANUALS	13
TABLE 5.	CASS TRAINING COURSES	16
TABLE 6.	PERSONNEL REQUIREMENTS	18
TABLE 7.	CASS ENVELOPE DIMENSIONS.....	20

FIGURES

<u>FIGURE</u>	<u>TITLE</u>	<u>PAGE</u>
FIGURE 1-1.	CONSOLIDATED AUTOMATED SUPPORT SYSTEM (CASS), AN/USM-636 (V), (HYBRID STATION (front view)).....	3

APPENDICES

<u>APPENDIX</u>	<u>TITLE</u>	<u>PAGE</u>
APPENDIX A.	CONSOLIDATED AUTOMATED SUPPORT SYSTEM (CASS), AN/USM-636(V) INTERIM SUPPORT ITEMS LIST (ISIL)	A-1
APPENDIX B.	INTERIM SUPPLY SUPPORT (ISS) PROGRAM REQUISITIONER'S HANDBOOK.....	B-i
APPENDIX C.	SUPPORT EQUIPMENT	C-1
APPENDIX D.	COMMON HAND TOOLS	D-1

1.0 INTRODUCTION

The Consolidated Automated Support System (CASS), AN/USM-636(V), as a unit, is a group of standardized, computer-assisted, multi-functional, automated testers that has been developed to reduce the proliferation of Navy Automatic Test Equipment (ATE); and, to provide the latest testing technologies to support future military electronic, avionic, and missile systems. The Secretary of the Navy (SECNAV) has directed that the use of CASS be expanded to provide support for all Navy electronics systems in accordance with SECNAVINST 3960.6 dated 12 October 1990.

The Naval Air Systems Command (NAVAIRSYSCOM), as the lead Systems Command, is procuring the initial CASS systems to support new development of emerging weapons systems and to retire obsolete ATE. CASS will be installed and operated at Aircraft Intermediate Maintenance Departments (AIMDs) afloat and ashore, Marine Air Logistics Squadrons (MALs), Naval Weapon Stations, Naval Aviation Depots, Navy training sites, and designated support sites.

This User's Logistics Support Summary (ULSS) specifically addresses site activation and logistics support requirements during the interim support period. The interim support period will end at the Navy Support Date (NSD). The NSD is the date on which the Navy will be capable of providing all CASS support including depot capability and training. Another major program milestone is the Material Support Date (MSD). The MSD is the projected date all CASS support materials will be within the Navy Supply System. Support procedures and responsibilities will evolve as CASS transitions to full organic support at MSD/NSD. The evolution of support procedures is addressed in the appropriate sections of this ULSS.

2.0 FUNCTIONAL DESCRIPTION

CASS is a five-rack integrated test system whose basic configuration is referred to as the Hybrid Tester. The addition of a sixth console to the basic configuration of the Hybrid Tester allows CASS to be configured into additional types of testers. Currently, there are eight configurations:

- ❖ Hybrid (HYB)
- ❖ Radio Frequency (RF)
- ❖ Communication, Navigation, Identification (CNI)
- ❖ Electro-Optical (EO)
- ❖ VECP Hybrid
- ❖ VECP RF
- ❖ VECP CNI
- ❖ EO+

These eight configurations will support both Weapons Replaceable Assemblies (WRAs) and Shop Replaceable Assemblies (SRAs). CASS is designed to accommodate variations in workload and to allow for Test Program Set (TPS) transferability among the different configurations. Only five EO stations have been procured and delivered. Two EO stations are currently at AIMDs. None are expected to be in the fleet by November 1999. Technical reference data for each configuration is provided in Tables 1 and 2.

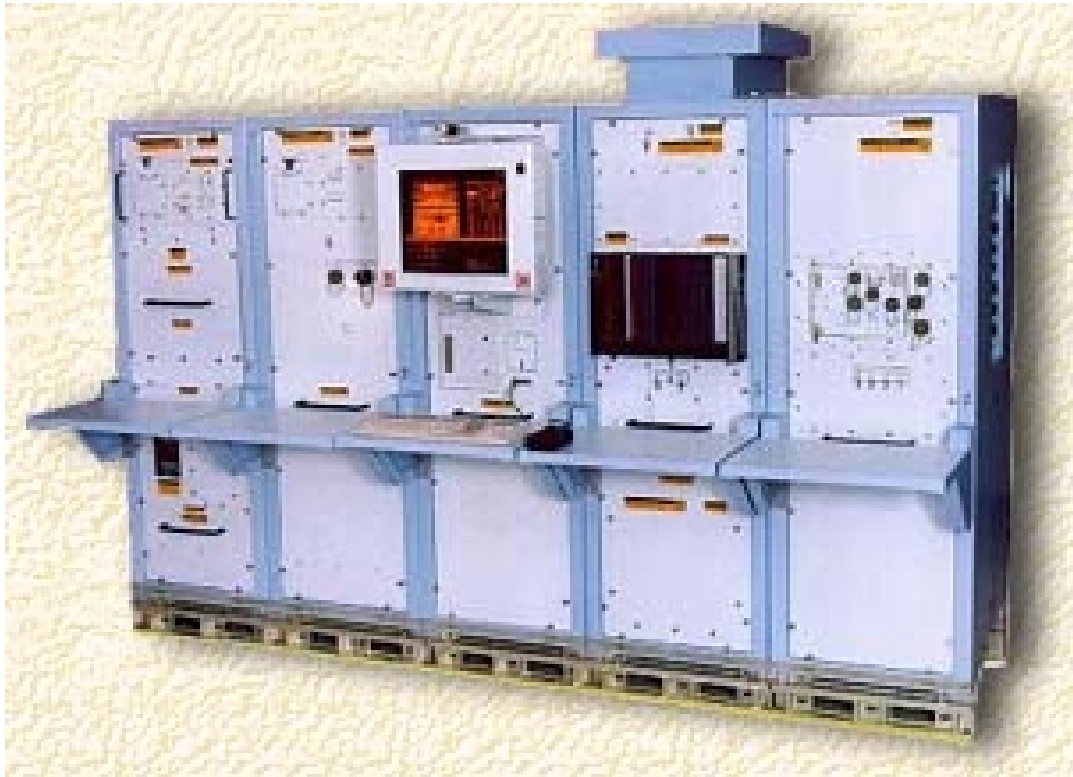
A Value Engineering Change Proposal (VECP) has been approved for the CASS Hybrid, RF, and CNI configurations. The VECP configuration stations include the following changes/updates:

- ❖ CPU Upgrade – Replaces the current 32 BIT computer with DEC Alpha computer.
- ❖ DTU Upgrade – Replaces the current DTU. Reduces size by two-thirds. Incorporates standard VXI interface instead of the current Teradyne backplane.

The VECP configuration also includes several streamlining ECPs:

- ❖ Timing Redesign – Replaces existing CFSD and Ribidium Frequency Standard with new COTS Ribidium Timebase Oscillator.
- ❖ LVSS Deletion – Eliminates 2 LVSSs from all station configurations. Moves one LVSS from Drawer 4 to Drawer 5. Eleven cables are eliminated, eight are added and 19 modified.
- ❖ WIU Redesign – Changes wire wrap boards to printed wiring boards.
- ❖ Arbitrary Waveform Generator Redesign B Replaces existing AWG with new COTS AWG.
- ❖ Elimination of Asset Controller for WDD B Replaces Asset Controller #1 in Drawer 5 with a Dummy Module Assembly and a Bus Continuation Jumper.
- ❖ Rack Redesign – Rack redesign to facilitate various process operations (i.e., welding, mechanical assembly, machining).

An Engineering Change Proposal has been approved on the EO configuration. This engineering change, an enhancement of the CASS EO, will provide several improvements in reliability, maintainability, supportability, and performance and capabilities. The technologies and components utilized in the existing EO configuration have become obsolete or more expensive with time. New technologies and components are being incorporated into the new EO configuration, called EO+.



**FIGURE 1-1. CONSOLIDATED AUTOMATED SUPPORT SYSTEM (CASS),
AN/USM-636 (V), (HYBRID STATION (front view))**

TABLE 1. CASS CONFIGURATIONS REFERENCE DATA LIST- (LRIP)

TITLE	HYBRID AN/USM-636A(V)1	RF AN/USM-636A(V)3	CNI AN/USM-636A(V)4	EO AN/USM-636A(V)2
Part Number	2048AS775-01	2048AS775-02	2048AS775-03	2048AS775-04
SERD	1001	1003	1004	1002
Manufacturer	Lockheed Martin	Lockheed Martin	Lockheed Martin	Lockheed Martin
CAGE Code	ONNS4	ONNS4	ONNS4	ONNS4
Nomenclature	CASS, Hybrid Test Set (LRIP)	CASS, RF Test Set (LRIP)	CASS, CNI Test Set (LRIP)	CASS, Electro-Optic Test Set (LRIP)
National Stock Number (NSN)	2VX4920-01-359-7392	2VX4920-01-359-7438	2VX4920-01-359-9063	2VX4920-01-359-7437
Work Unit Code (WUC)	78RA0	78RG0	78RN0	78RE0
Type Equipment Code (TEC)	GAFB	GAFF	GAFE	GAFC
SM&R Code	PEGGD	PEGGD	PEGGD	PEGGD
ADMRL Number	R5925-1	R5925-3	R5925-4	R5925-2
Aircraft Application	Common	Common	Common	Common
MaPI Number	M75093008	M75093010	M75093011	M75093009

TABLE 2. CASS CONFIGURATIONS REFERENCE DATA LIST- (VECP)

TITLE	VECP HYBRID AN/USM-636(V)5	VECP RF AN/USM-636(V)6	VECP CNI AN/USM-636(V)7	EO+ AN/USM-636(V)8
Part Number	2054AS400-01	2054AS400-02	2054AS400-03	2054AS400-04
SERD	2001	2002	2003	2004
Manufacturer	Lockheed Martin	Lockheed Martin	Lockheed Martin	Lockheed Martin
CAGE Code	ONNS4	ONNS4	ONNS4	ONNS4
Nomenclature	CASS, Hybrid Test Set (VECP)	CASS, RF Test Set (VECP)	CASS, CNI Test Set (VECP)	CASS, Electro-Optic Test Set Plus
National Stock Number (NSN)	2VX6625-01-432-2874	2VX6625-01-432-2876	2VX6625-01-432-2875	6RX4920014529019
Work Unit Code (WUC)	78RA0	78RG0	78RN0	78RF0
Type Equipment Code (TEC)	GAFH	GAFJ	GAFK	GAFL
SM&R Code	PEGGD	PEGGD	PEGGD	PEGGD
ADMRL Number	R5925-1	R5925-3	R5925-4	R5925-2
Aircraft Application	Common	Common	Common	Common
MaPI Number	M75096002	M75096003	M75096004	M75098001

3.0 MAINTENANCE CONCEPT

The maintenance concept for CASS is in consonance with the three levels of maintenance as stated in the Naval Aviation Maintenance Program Manual, OPNAVINST 4790.2 series. CASS incorporates extensive self-test, Built-In Test (BIT) and Built-In Test Equipment (BITE) which is designed to maximize maintenance at the Intermediate-level (I-level). System malfunctions are detected on-line and automatically fault-isolated to a single SRA 74 percent of the time, two or fewer SRAs 83 percent of the time, and three or fewer SRAs 89 percent of the time. An out-of-calibration condition is considered a system malfunction. Under the CASS maintenance concept, which was fully implemented after NSD in February 1997, defective SRAs will be removed and replaced by I-level personnel. Removed SRAs will normally be fault-isolated to the lowest level component, repaired, recalibrated, or discarded at the I-level or Depot-level (D-level) depending upon the Source, Maintenance and Recoverability (SM&R) Code. There are some SRAs where only the D-level is authorized to perform removal and replacement (SM&R coded **DGD), i.e. all of the consoles (racks) are coded XBDGD. The I-level cannot remove and replace a console but they may repair and/or remove and replace the assets within each console. In these instances, the I-level is authorized repair or removal and replacement of lower level subassemblies.

Maintenance Assist Modules (MAMs) are documented in the approved maintenance plans. CASS MAMs can be requisitioned (7R COG) in accordance with Naval Inventory Control Point Philadelphia (NAVICP-PHIL) Field Instruction 4790.1L dated 15 July 1994. All initial 7R COG MAMs should be requisitioned (pulled) by the operating site when authorized by NAVICP-PHIL. IMA 7R COG requisitions should cite a "5D" Advice Code, a "QZ" Fund Code and a Supplementary Address of MAMXXX. In addition, 1R COG requisitions from all sites should cite the activity End Use Fund Code. MAMs are currently allowed one set per site. MALS sites are allowed two sets per site. The following MAMs have been identified and procured to date:

CASS (Pre-VECP Configurations)

<u>Item Name</u>	<u>Part Number</u>	<u>NSN</u>
LVSS	1896AS501-04	6130-01-408-0377
LVSS	1896AS501-05	6130-01-408-0378
LVSS	1896AS501-10	6130-01-408-0376
Asset Controller	1896AS889-02 (RF only)	5998-01-411-5127
Asset Controller	1896AS889-03 (Hybrid only)	5998-01-408-4153
Asset Controller	1896AS889-04 (All configs)	5998-01-408-4151
Calibration Freq. Std.	2049AS482-01	6150-01-408-6565
Power Controller 1	2048AS464-01	5998-01-408-2048
Power Controller 2	2048AS821-01	5998-01-408-4165
Power Controller 3	2048AS824-01	5998-01-408-9884
Power Controller 4	2049AS498-01	5998-01-408-9886
DTU Card CT-511	859-511-00	5998-01-345-4027
CCA	M7622	5998-01-344-4141
CCA	M7625-AA	5895-01-353-0168

CASS (VECP Configurations)*

<u>Item Name</u>	<u>Part Number</u>	<u>NSN</u>
LVSS	1896AS501-05	6130-01-408-0378
Asset Controller	1896AS889-02 (RF only)	5998-01-411-5127
Asset Controller	1896AS889-03 (Hybrid only)	5998-01-408-4153
Asset Controller	1896AS889-04 (All configs)	5998-01-408-4151
Power Controller 1**	2048AS464-03	6130-01-457-7822
Power Controller 2	2048AS821-01	5998-01-408-4165
Power Controller 3	2048AS824-01	5998-01-408-9884
Power Controller 4	2049AS498-01	5998-01-408-9886
Ethernet Module**	2T-22477-01	5895-01-420-8105
Ethernet Hub***	EN104	TBD

Pneumatic Function Generator (Ancillary Equipment)

<u>Item Name</u>	<u>Part Number</u>	<u>NSN</u>
Electronics Module	6660-512	6625-01-440-5163

*Projected availability date for VECP Unique MAMs has not been established.

**These MAMs are VECP unique. Only the VECP unique MAMs will be authorized for sites already with a set of Pre-VECP MAMs.

***EO+ unique MAM.

3.1 ORGANIZATIONAL LEVEL (O-LEVEL) MAINTENANCE

There is no O-level maintenance requirement for CASS.

3.2 INTERMEDIATE (I-LEVEL) MAINTENANCE

CASS will be operated and maintained by both operators and maintenance technicians in the work centers where CASS is installed. Maintenance functions include both preventive and corrective actions.

Preventive Maintenance. Preventive maintenance consists of daily confidence tests and scheduled maintenance tasks including system disk software maintenance, at prescribed calendar or operating intervals. CASS has an annual system calibration requirement that is performed by the Calibration/Advanced Maintenance Technician.

Corrective Maintenance. Corrective maintenance actions on CASS station modules and ancillary equipment will consist of repair or replacement of defective/unserviceable modules or SRAs. If an embedded standard is removed and replaced as the result of an unscheduled maintenance action, the CASS system must be recalibrated before use.

3.3 DEPOT LEVEL (D-LEVEL) MAINTENANCE

D-level maintenance consists of both the preventive and corrective maintenance functions as described above and includes tasks beyond the capabilities of the I-level. SOS OTPS 1 is D-level only.

3.4 SYSTEM TESTING

CASS has four levels of testing that monitor operation and, in the event of a failure, notify the operator of the failure and the cause. Levels One and Two are Power-Up BIT and the Self Maintenance (SMAT) Confidence Test (CONF-ST). Both are automatically executed when the test set is powered up, so there is no need for the operator to execute them manually.

Level Three is SMAT (background SMAT is automatically initiated; foreground SMAT is operator initiated). SMAT will check for most component failures within the test set, but cannot check electrical paths associated with interface points in the test set. SMAT runs automatically at power up, and when the test set is idle. No operator intervention is required.

Level Four is SMAT Input-Output (IO-ST) testing, which checks electrical interface points and associated components. SMAT IO must be initiated by the operator, and requires an Operational Test Program Set (OTPS). In the event of a failure in the test set, repair is accomplished by removal and replacement of the failed component. Most cables may be repaired on equipment. Maintenance actions will be accomplished using common and peculiar test equipment and hand tools. Peculiar items have been kept to a minimum. Repairs are accomplished in accordance with technical manuals NAVAIR 16-30USM636-2-1, 2-2, 3-1, and 3-2; NAVAIR 01-1A-505; and, NAVAIR 01-1A-23.

The Calibration OTPS and/or the SMAT OTPS are required for most repair actions. Once a fault has been identified and the faulty component is removed, it may be repaired off equipment using the Support of Support (SOS) OTPS. When a component is replaced in the test set, the maintainer shall initiate the appropriate programs (SMAT, SMAT IO, and/or CAL) to verify the repair and/or recalibrate that part of the test set.

4.0 SITE ACTIVATION/DELIVERY SCHEDULE

Site delivery/activation schedules are in accordance with the CASS Implementation Plan. The North Island Install Team is responsible for installing rails (shore sites), mounting the station to rails, supervising power hook-ups, energizing the station, resolving any failures, successfully running SMAT and CAL, and presenting Team Leader and Site Representative Certificate of Completion. SOS OTPS #2 and CAL & SMAT OTPS's, as well as most peculiar support equipment and peculiar tools, will be delivered to each site. Appendix A lists approved peculiar support equipment. Current workload does not require push of Common Support Equipment (CSE). CSE not currently available must be pulled.

Delivery of CASS Optical Readers to fleet sites commenced June 1995. Initial Outfitting will provide two Optical Readers per site. CASS SOS, CAL & SMAT OTPS's are verified at sell-off; no verification will be performed on site. Appendix D lists common hand tools required for CASS maintenance. Each site is responsible for obtaining the following items for CASS:

Computer Printer Paper, 14" tractor feed (standard) NSN 7530-00-145-0414

Ethernet Cable - Coaxial, which consists of:

<u>Item Name</u>	<u>Part Number</u>	<u>NSN</u>	<u>CAGE</u>	<u>Price</u>	<u>Quantity</u>
Connector (TNC)	M39012/26-0001	5935-01-043-5841	96906	\$2.56	2
Coaxial Cable	RG-58A/U	6145-00-542-6092	81349	\$0.12/ft	Site Dependent

The following calibratable assets are part of the CASS Station. The CAL stickers on these items when delivered are marked for 12-month intervals. The correct calibration intervals for these items are 36 months. Please re-sticker these items to reflect the correct interval. Any questions should be addressed to Mr. Hafiz Balkhi, NWA Corona, at (909) 273-5741 or DSN 933-5741.

<u>CASS Config.</u>	<u>Part Number</u>	<u>Item Name</u>	<u>CAGE</u>	<u>Correct Interval</u>
All	70502-26	Precision Freq. Std.	55761	36
RF/CNI	8481D	Power Sensor	28480	36
RF/CNI	8482A	Power Sensor	28480	36
RF/CNI	8485A	Power Sensor	28480	36
RF/CNI	8485D	Power Sensor	28480	36

The following calibratable assets are used with the CAL/SMAT OTPS. Due to long-time storage, these items may require calibration at time of receipt:

<u>Part Number</u>	<u>Item Name</u>	<u>CAGE</u>
8487A	Power Sensor	28480
8493C/OPT. 30	Attenuator	28480
85054-60024	Type-N Gage Set	28480
8710-1582	Torque Wrench	28480
8710-1765	Torque Wrench	28480
A027A	Gage Set, SMA	13047
A034B	Gage, Contact Electrical	13047

5.0 INTERIM SUPPORT

Level Four testing using Support-Of-Support (SOS) OTPS is the methodology by which maintenance personnel will fault isolate failed SRAs. Without the SOS OTPS maintenance is limited to removal and replacement of failed components identified during Level Three testing.

During the interim support period, until OTPS #2 has been received, all failed SRAs, regardless of SM&R code, will be turned in to supply for repair under the CASS Repair-of-Repairables (ROR) program. Replacement SRAs will be requisitioned through the Interim Supply Support (ISS) program.

Shore sites will utilize the Interim Supply Support (ISS) procedures identified below to pull spares and repair parts when required. The Interim Supply Support LEM is Mr. Rich Fitzhenry, NAVICP Code 03321.2. All spares and repair parts under the ISS program are managed in accordance with NAVAIRINST 4408.2, NAVSUPINST 4400.93 and NAVICPINST 4400.18B.

Processing of ISS material is to be accomplished in accordance with the MRIL and NAVSUP P-567, Shore Supply Procedures. Failed material turned into the local supply point will be forwarded to the ATAC Hub for further shipping to the ROR facility. The following procedures apply when requesting CASS material under the ISS program:

- Obtain correct part number and other pertinent data from the failed item
- Enter part number into Status Inventory Data Management System (SIDMS) in order to obtain the NSN or I-NICN. If the above step provides negative results, or NRMM/SIDMS is not available, the ISS Data Microfiche should be used to obtain a NSN or I-NICN
- Submit requirements to the supporting supply activity in accordance with established procedures
- Clearly mark the requisition as "ISS" and ensure part numbered requirements contain all applicable information

5.1 INTERIM SUPPORT LIST (ISIL)

The ISIL reflects the Original Equipment Manufacturer's (OEM's) recommended spare and repair parts necessary to support the CASS station during the interim period. A copy of the open ISIL for CASS are provided as Appendix "A". Parts in the ISIL may be requisitioned from ISS warehouses located at NAS North Island and MCAS Beaufort, following the procedures outlined in Appendix "B". This handbook details ISS policy, procedures, and responsibilities for all activities involved in aviation supply support, and is a step-by-step guide for identifying, requisitioning, and disposing of retrograde ISS material. Detailed procedures for ISS are also contained in NAVAIRINST 4408.2

5.2 TECHNICAL SUPPORT

The Cognizant Field Activity (CFA) will provide technical support, as required. The CFA for CASS is NADEP North Island. See section 6.0 for the names of the individuals, office codes and phone numbers applicable to the type of support desired.

Contractor Engineering and Technical Services (CETS) have not been procured under the current acquisition contract. Engineering and Technical Support (ETS) services are available through Naval Air Technical Data and Engineering Services Command (NATEC), formerly known as NAESU. NATEC services are available through your local NATEC procedures.

6.0 LOGISTIC SUPPORT MANAGEMENT TEAM

Table 3 provides the names, office codes, and phone numbers of key personnel involved in the support of the CASS program.

TABLE 3. KEY GOVERNMENT PERSONNEL

NAME/CODE	ORGANIZATION	FUNCTION	PHONE
Barbara Long / AIR-3.1.4G	NAVAIR	CASS APML	(301) 757-6886
LCDR Ken Campitelli / AIR-3.1.4.4	NAVAIR	CASS Deputy APML	(301) 757-6891
Maureen D. Kizeik / 3.1.4.4	NAWCADLKE	DAPML, CASS Hardware	(732) 323-7932
Tim Brennan / 3.1.4.4	NAWCADLKE	DAPML, TPS Development	(732) 323-4208
Mary Beth Bruno / 3.1.4.4	NAWCADLKE	ULSS POC	(732) 323-2194
Rich Fitzhenry / 03321.2	NAVICP	Supply Support Team Leader	(215) 697-2541
LCDR Carlos Lopez / PMA-205-3D	NAVAIR	Training	(301) 757-8122
Tony Richie / 3.1.4.4	NADEP NORIS	CASS FST LM	(619) 545-9453
Richard Jones / 3.1.4.4	NADEP NORIS	CASS Configuration Manager	(619) 545-2689
Linda Weissenberger / 4.8.8.3	NADEP NORIS	CASS FST Team Leader	(619) 545-3997
Roy DeGurse / 4.8.8.3.3	NADEP NORIS	Depot Install Team	(619) 545-2064
Wayne Knapp / 4.8.10.8	NAWCADLKE	Calibration Software	(732) 323-2960
Bill Darling / 4.8.8.7	NAWCADLKE	CASS Software	(732) 323-2779
John Smeaton / 3.3A74	NATEC	Technical Publications	(619) 545-2229
Pat Berrill / N422B2PB	AIRLANT	Fleet Support	DSN 564-4591
Dave Ritch / N422B1R	AIRPAC	Fleet Support	DSN 735-1297
Bill Birurakis / PMA260D34	NAWCADPAX	CASS Technical Lead	(301) 826-3154
Wally Partridge / N422B1W	AIRPAC	CAL Standards SECA	DSN 735-1317
Don Whit / N422B2DW	AIRLANT	CAL Standards SECA	DSN 564-3843

7.0 SUPPLY SUPPORT REQUIREMENTS

7.1 PROVISIONING

Material support for CASS will be provided under the NAVAIR ISS Program until MSD. The ISS program is an initiative to standardize the management of ISS material for aviation weapon systems and end items of Support Equipment (SE) during the ISS period. The ISS period is sometimes referred to as the augmented support period and/or pre-MSD support. The ISS program mirrors the Navy supply system and is virtually invisible to fleet users. Prior to MSD, NAVICP Code 03321.2 is the Inventory Control Point Representative (ICPR). After MSD, NAVICP Code 03321.3 assumes responsibility as ICPR.

At MSD, the Allowance Requirement Register (ARR) replaces the ISAL as the source document for support material. Spares and repair parts requirements will be developed based on the number of stations assigned, types of configurations and operating hours. Based on the ARR, CASS spares and repair components requirements will be included as an integral part of each sites Shore Consolidated Allowance List (SHORECAL) or Aviation Consolidated Allowance List

(AVCAL).

The MSD for the HYB, CNI and RF configurations was achieved 15 February 1997. MSD for the VECP configurations is currently scheduled for September 2000. MSD for the EO+ configuration is scheduled for July 2000.

7.2 ALLOWANCE PARTS LISTS

Initial spare and repair parts support will be available from establishment of IOC, i.e., delivery of first production Test Stand unit, until MSD is achieved. Updates and specific changes to allowance parts lists will be included in future revisions of this ULSS.

8.0 TECHNICAL DOCUMENTATION

General. By definition, CASS technical data includes both engineering drawings and Technical Manuals (TM). There are no drawing requirements for CASS at the I-level. CASS TMs, referred to as Automated Technical Information (ATI), have been developed in digital format and will be delivered on optical disk. The ATI disk part numbers are AT-CASOD-CAS-000, AT-CASOD-CAS-010, and AT-CASOD-CAS-030.

CASS TM Description. The development of CASS ATI is in consonance with the Department of Defense (DoD) Continuous Acquisition and Life Cycle Support (CALC) initiatives. CASS ATI is displayed on the station electro-luminescent display and individual pages may be printed in hard copy on the ancillary printer if required. ATI provides for easy access, reduced storage space requirements, and single page printing from the CASS station. CASS technical manuals are listed in Table 4.

TABLE 4. CASS TECHNICAL MANUALS

MANUAL NUMBER	NAME
Disk Number AT-CASOD-CAS-000, NSN 0896-LP-823-7200, 1 Jan 99 (Includes CASS LRIP and VECP Configurations)	
NAVAIR 16-30USM636-1-1	Operator Instructions
NAVAIR 16-30USM636-2-1	Intermediate Maintenance w/IPB
NAVAIR 16-30USM636-2-2	Intermediate and Depot Maintenance w/IPB for Shop Repairable Assemblies
NAVAIR 16-30USM636-3-1	Intermediate Maintenance w/IPB for SMAT Support Equipment
NAVAIR 16-30USM636-3-2	Intermediate Maintenance w/IPB for CAL Support Equipment
Disk Number AT-CASOD-CAS-010, NSN 0896-LP-823-7300, 15 Mar 96	
NAVAIR 16-35ON403-1	Intermediate Maintenance w/IPB for Common ID Set
NAVAIR 16-35ON428-1	Intermediate Maintenance w/IPB for SOS OTPS #2
Disk Number AT-CASOD-CAS-020, NSN 0896-LP-823-7400, 15 MAR 96	
NAVAIR 16-35ON427-1	Depot Maintenance w/IPB for Test Accessories Set
EO Peculiar Supplements	
Disk Number AT-CASOD-CAS-030, NSN 0896-LP-004-9380, 15 May 96 (This disk is incomplete without Disk Number AT-CASOD-CAS-000.) (These work packages are not applicable to non EO stations.)	
NAVAIR 16-30USM636-2-1A	Intermediate Maintenance w/IPB
NAVAIR 16-30USM636-2-2A	Intermediate and Depot Maintenance w/IPB for Shop Repairable Assemblies

ATI Support. The CASS ATI change process utilizes existing systems to the fullest extent possible. Changes to CASS ATI are driven by various requirements as identified below.

- Technical Publication Deficiency Reports (TPDRs) – TPDRs against CASS ATI are processed in accordance with NAVAIR 00-25-100.
- Engineering Change Proposals (ECPs) – CASS ECPs are processed in accordance with the CASS Configuration Management Plan of 1 November 1993. ATI updates resulting from approved ECPs are funded and incorporated in accordance with the ECP.
- Rapid Action Chits (RACs) – RACs are processed in accordance with NAVAIR 00-25-100.
- Type IA and IB Interim RACs – These Interim RACs are utilized for CASS ATI.
- Type II Formal RACs – These RACs are not utilized for CASS ATI. Change pages used for paper manuals do not apply to ATI.

The ATI optical disk is the medium for technical manual updates. Updated disks are provided as change requirements dictate or at a minimum on an annual basis. Change pages are not applicable to ATI. To automatically receive future changes and revisions to NAVAIR TMs, an activity must be established on the Automatic Distribution Requirements List (ADRL) maintained by NATEC. To become established on the ADRL, activities should contact their central technical publications librarian. Annual reconfirmation of these requirements is necessary to remain on automatic distribution.

To requisition CASS ATI optical disks, follow the same procedures as those followed for ordering a paper manual. Refer to NAVAIR 00-25-100, NAVAIRSYSCOM Technical Manual Program.

A separate allocation of ATI technical manuals is provided with each CASS station on a 5-1/4" optical disk and an additional disk is provided with the Optical Reader. A copy of the disks shall be retained in the activity's technical library in accordance with OPNAV 4790.2 guidelines for technical data. If the disk is lost, damaged or data becomes corrupted, the activity may request a replacement disk from NAWCAD, Code 4.8.10.8 (Attn. Mr. W. Knapp), Lakehurst, NJ 08733.

CASS ATI optical disks are reusable. Do not destroy obsolete or superseded optical disks. Upon receipt of a revised ATI disk, return the old disk in the same package used to ship the new disk. A mailing label will be enclosed for the return of the old disk. It should read:

Commander
Naval Air Warfare Center Aircraft Division
Code 4.8.10.8 (Attn: Mr. W. Knapp)
Bldg. 551 – CASS Software Support
Lakehurst, NJ 08733-5000

If the shipping container is damaged or deemed unusable, use any means that will reasonably assure the safe shipping of the optical disk. Return old optical disks within 15 days in order to maintain adequate inventory levels and ensure authorized quantities per site are available for future updates.

Maintenance Requirement Cards (MRCs). MRCs are not scheduled for procurement/delivery. Local MRCs should be developed in accordance with existing NATEC policy. Scheduled maintenance requirements are minimal and include System Disk Backup (monthly), replacement of air filter elements and cleaning and inspection of adapters and connectors (qtrly), system disk procedures (semi-annually), ground safety test and CAL OTPS procedures (annually) and calibration of standards (3 years from cal sticker on standard). NATEC has determined that formal MRCs are not required. Scheduled maintenance is addressed in NAVAIR 16-30USM636-2-1, WP 033.

9.0 SUPPORT EQUIPMENT (SE)

General. This section addresses the CSE and Peculiar SE (PSE) and hand tools, including self maintenance and SOS OTPS, required to support operation and repair of the CASS. The CASS design concept minimizes test equipment requirements by providing self monitoring, measurement and test parameters as well as self maintenance and diagnostic SOS OTPSs. As described in Section 3.4, CASS has many levels of functional testing, most of which are transparent to the operator during normal station operation. Internal testing for many components is primarily accomplished with BIT which identifies problems to the operator via station software. Input/Output interface testing and station maintenance requires the use of test and support equipment external to the station.

SE Requirements. Appendix "C" lists the SE, including calibration standards and TPSs, approved for CASS. NSNs assigned to date are also provided in Appendices "C" and "D". The list of SE may change as recommended equipment is added, modified or deleted. As CASS SE Recommendation Data (SERDs) are approved and included in the SE Resources Management Information System (SERMIS), Individual Material Requirements Lists (IMRLs) will be developed.

CSE. CSE is listed in Appendix "C". Availability of CSE is addressed in Section 4. Common hand tools are identified in Appendix "D".

PSE. PSE is also included in Appendix "C". Availability and delivery of PSE are addressed in Section 4.

Calibration Standards. Calibration standards are listed in Appendix "C". All calibration standards are pushed to the CAL Standards SECA and pulled by the user via the SECA.

Ancillary Equipment. Ancillary equipment is used in conjunction with the various configurations of CASS to support the driver requirement. The delivery schedule for ancillary equipment is addressed in the CASS Introduction Plan. The printer will be delivered during installation of CASS. CASS ancillary equipment includes:

- Pneumatic Function Generator (PFG)
- Printer
- RS-485 Bus Manchester Harpoon
- Video Pattern Generator (VPG)
- RF Probe
- Power Strip Set
- External Hard Drive

VPG is scheduled for fleet delivery commencing December 2000. Delivery of the External Hard Drive for classified testing commenced June 1998. Delivery of the Power Strip is scheduled for FY-99.

CASS Optical Reader. The CASS Optical Reader, AN/UYK-105, Part Number 3421AS100-1, was developed by NAWCADLKE 4.8.3.1 for viewing ATI when it cannot be viewed on station. The Optical Reader is composed of a CPU, monitor, keyboard, trackball, and external optical disk drive and miscellaneous power cables. It will be shipped to each site and installed by the NAWCADLKE Optical Reader Installation Team. The Installation Team POC for the Optical Reader is Bonnie Adams, 908-323-7759, DSN 624. A placard providing troubleshooting tips and diagram will be provided along with a Optical Reader User's Guide, Technical Manual Number NAVAIR 16-30UYK105-1. The User's Guide includes operating, maintenance and supply support procedures.

Maintenance of the Optical Reader will consist of removal and replacement of the five major components and the power cables and repair or discard in accordance with the SM&R code of each component. ISS is provided for as addressed in Section 5 of this document. The Optical Reader is also covered under the ROR contract with Lockheed Martin.

10.0 TRAINING REQUIREMENTS

General. Formal CASS training is required to ensure that qualified personnel are available to operate and maintain CASS in support of fleet activities. The personnel and skill levels required to perform these functions are addressed in this section.

Information on planned training for fleet personnel by activity may be found in the CASS Navy Training Plan (NTP); A-50-8515B/A. Its replacement, the NTSP, is currently being reviewed by OPNAV and will supersede A-50-8515B/A as the planning document for training and manpower requirements. This section also addresses milestones related to CASS training.

Training. A systems approach has been applied in the development of the CASS training program that provides designated maintenance technicians with essential knowledge and skills to operate and maintain the CASS system in the fleet. Long range requirements for CASS training are projected in the CASS Navy Training Plan.

Scheduling. CASS training was conducted as required by PMA-205 at the Lockheed Martin facility in Daytona Beach, Florida until organic capability was developed. Training courses for CASS-associated NECs and MOS are listed in Table 5. Quota control is assigned to Naval Air Maintenance Training Group Detachments (NAMTGDs) at:

Atlantic	NAMTGD Oceana	DSN 433-3362/Comm (757) 433-2970
Pacific	NAMTGD Miramar	DSN 577-6031/Comm (619) 537-6031

After the initial training of NAMTGD instructors, Follow-On Training was established at NAMTGD Oceana. NAMTGD Oceana achieved Ready-For-Training (RFT) in January 1994 and NAMTGD Miramar in January 1995.

TABLE 5. CASS TRAINING COURSES

COURSE NUMBER	TITLE	NEC/MOS	OFFERED BY	LOCATIONS	LENGTH	QUOTA CONTROL
C-198-3044	CASS Operator/Maintainer	6704/ 6467/ 6469	NAMTGD	Oceana, VA Miramar, CA	7 Weeks	NAMTGD
C-198-3043	CASS Calibration/ Advanced Maintenance Technician	6705/ 6467/ 6469	NAMTGD	Oceana, VA Miramar, CA	4 Weeks	NAMTGD

Courses. The two formal training courses for CASS are listed in Table 5. NAMTGD Oceana is the Course manager for the CASS courses.

Current Training Initiatives. The following additions to the CASS training curriculum are being made by the CASS Curriculum Model Manager (CCMM):

C-198-3044 CASS Operator/Maintainer Course

- Unit Under Test (UUT) Test Program Set (TPS) training
- Automatic Test Equipment (ATE) familiarization training
- Additional Support of Support (SOS) specific lab time
- EO+ training
- VECP training

C-198-3043 CASS Calibration/Advanced Maintenance Technician Course

- Advanced Fault Isolation training for both CASS SOS UUTs and representative sample of Weapons System (WS) UUTs
- Direct Instrument Control System (DICONs) and DEBUG advanced fault isolation utilities training
- Advanced ATLAS troubleshooting instruction
- Pneumatic Function Generator (PFG) lesson topic

Computer Based Training has been implemented at both NAMTRAGRUDETs and various fleet sites.

Operations Management. CASS possesses an Operations Management Capability that can be utilized to create accounts on the CASS station. Detailed procedures for use of the accounts are found in the CASS Operator Instructions, NAVAIR 16-30USM636-1-1.

10.1 SECURITY REGULATIONS AND CLEARANCES

All personnel are expected to comply with the requirements applicable to the system/equipment upon which the training is to be conducted. Security regulations apply to personnel, training materials, and space being used for the training program and will be in accordance with DoD 5220.22-M or OPNAVINST 5510.1. Non-Government personnel involved in the development or conduct of the training program and requiring access to a government facility shall forward security clearances and visit requests to government installations at least 30 days prior to the start of the training program.

11.0 PERSONNEL

CASS manpower is driven by the requirement for operator-maintainers and technicians and the preventive and corrective maintenance requirements. CASS stations will be manned to operate two eight-hour shifts, five days per week at shore AIMDs and two twelve-hour shifts, seven days per week on carrier AIMDs. Sea Operational Detachments (SEAOPDETs) will augment their host AIMDs by manning some billets with personnel who deploy with but are not assigned to an aircraft carrier.

Fleet Personnel. Navy personnel from the Aviation Electronics Technician (AT) rating with Navy Enlisted Classification (NEC) 6704 will perform operation and maintenance of CASS. AT personnel with NEC 6705 will calibrate CASS and perform advanced maintenance tasks when identified. Marine Corps personnel with Military Occupational Specialty (MOS) 6467 (E-1 through E-5) and MOS 6469 (E-6 through E-7) will operate CASS and perform all maintenance, including calibration. Manpower requirements, by rating, NEC/MOS, and skill levels to operate, maintain, and support the system and related SE, are identified in Table 6.

TABLE 6. PERSONNEL REQUIREMENTS

SPECIALTY	RATE/NEC/MOS	SKILL LEVEL	NUMBERS
CASS Operator/ Maintainer	AT/ET-6704	E3/4/5/6	1.3 per station/per shift
CASS Calibration/Advanced Maintenance Technician	AT/ET-6705	E5/6/7	One per shift/per ten stations
CASS Operator/Maintainer/ Technician (USMC)	6467/6469	E1/2/3/4/5/6/7	One per station/per shift

12.0 COMPUTER RESOURCES/SOFTWARE SUPPORT

The CASS Computer Resources Life Cycle Management Plan (CRLCMP) describes the basis for life cycle management of software and its relationship to the End Item. It defines organizations, management procedures, responsibilities, requirements, and controls for End Item software evolutions, from contractor development and support to government organic support. The CRLCMP provides the plan for the development and support of Mission Critical Computer Resources (MCCR). The CRLCMP was prepared by NAWCAD Lakehurst, NJ and approved December 1990. Revision 1 was approved 15 October 1992. Revision 2 was approved 12 May 1995. Revision 3 was approved 14 June 1996. Revision 4 is currently in process an expected third quarter FY 99.

13.0 MAINTENANCE FACILITY REQUIREMENTS

This section addresses both the site specific and generic facility requirements necessary for the installation, operation, maintenance, and support of the CASS station, and its associated equipment. Detailed information on facility requirements and installation data can be found in the Facilities Requirements Document (FRD) for Typical Shore Based and Shipboard Based Sites (# 2052AS263, Rev. A) and the Ground Support Equipment Installation Data (# 2052AS262, Rev. A). Both documents are available from NAWCADLKE 4.8.5.2, cognizant Type Commander or Support Equipment Controlling Authority (SECA). Site specific information for each activity is addressed in the CASS Site Activation Planning Guide.

CASS is designed to be separated into individual racks for ease of handling during transport and installation. With the exception of rack four, each rack measures 74 inches high, 34 inches deep and 24 inches wide. Overall station envelope dimensions are provided in Table 13-1. Existing facilities at Intermediate maintenance activities have been deemed sufficient to facilitate CASS with the removal of existing obsolete ATE.

Facility evaluation for modification was based on the following requirements for CASS.

Space Required for Shipping, Supplies, Maintenance, Training and Storage. There will be variations to the requirements for shipping, supplies, maintenance, training, and storage depending on the number and type of configurations at each site. In most cases, the existing facilities will be adequate to support CASS. Table 7 identifies space requirements as they apply to CASS and CASS ancillary equipment.

Utility Requirements. The various types of support utility requirements are summarized in the following paragraphs. The authoritative source of utility is contained in the current version of the Facility Requirements Document.

Power Requirements. All configurations of CASS are capable of interfacing with any wye-to-delta, wye-to-wye, delta-to-wye, or delta-to-delta hookup combination without using external transformers. CASS is designed to use 50/60 Hertz (Hz) internally and provides up to 2 KVA of 400 Hz power (required to power up Units Under Test (UUTs) only). In the event that a UUT will require more than the 2 KVA provided, external 400 Hz power should be provided and passed through CASS.

Incoming facility power is connected at the Electromagnetic Interference (EMI) filter on Rack 1. In the event that ancillary equipment is added, the EMI filter is removed from Rack 1 and mounted on the ancillary equipment.

The printer requires external 115 VAC 50/60 Hz utility power for operation in case of station failure. If station power is lost, there is a 5 second download window during which failure data is loaded into the printer buffer and automatically printed for maintenance purposes.

Peak power usage of a single CASS configuration is 13 KW of type I power. The circuit should be protected according to the type of power used.

Cooling Air Requirements. Each CASS configuration is cooled with internal fans using ambient air. Air entrance is at the bottom of each rack, and exits at the top of each rack. CASS does not require forced cooling air, but does require that the ambient room temperature remain below 80 degrees Fahrenheit (max). Three tons of cooling air per CASS station is required to achieve this temperature.

TABLE 7. CASS ENVELOPE DIMENSIONS

	OPERATING DIMENSIONS						STORAGE DIMENSIONS			WEIGHT
	SHORE			SHIP/MOBILE						
	D	W	H	D	W	H	D	W	H	
HYBRID	*54	128	83	*58	128	83	34	128	83	4304
CNI/RF	*54	152	83	*58	152	83	34	152	83	5112
EO+	96	231	83	100	231	83	36 ***	32 ***	61 ***	716
PNEUMATICS	*54	24	83	*58	24	83	34	24	83	716
PRINTER	19	22	9	19	22	9	19	22	9	30
SOS OTPS 1	**	**	**	**	**	**	36	36	36	50
SOS OTPS 2	**	**	**	**	**	**	60	60	60	100
<p>* Includes twenty inches for work shelves (ship/mobile also includes four inches for rear shock mounts). With drawer number 3 in the open position the dimension is an additional twenty eight inches.</p> <p>** SOS OTPS1 and SOS OTPS2 operating dimensions are included in the test set operating dimensions. Measurements for weight and storage space are approximations.</p> <p>*** EO+ Console Dimensions Only</p>										

The Pneumatics rack, printer, Optical Reader, and SOS OTPS require no additional cooling air.

Cooling requirements of the UUTs must also be taken into account by the facility. In many cases, ambient air and built in cooling fans will meet UUT cooling requirements; some UUTs however require additional cooling. Specific requirements will be addressed within each TPS procurement.

Grounding Requirements. CASS is grounded from drawer to cabinet, and from cabinet to a single point grounding lug located at the lower front of each CASS station configuration. A grounding strap is then attached externally from the grounding lug to a single point facility ground. A low resistance grounding system is required. Facility grounding, embedded below moisture level, should not have a resistance to earth ground in excess of five ohms.

Special Requirements for Clean Rooms, Security or Special Storage. There are no clean room requirements identified to date for the CASS station, or its associated equipment.

Electro-Optics Requirements. The CASS Electro-Optical configuration includes a laser system classified as a Class I system. However, WRAs to be tested are classified as Class IV and therefore require a laser-safe facility that meets the Occupational Safety and Health Administration (OSHA) and American National Standards Institute (ANSI) requirements for a laser-safe environment.

Security Requirements. CASS requires no special security requirements. The Navy will determine security requirements for UUTs, and where appropriate, security procedures will be described in the applicable Test Program Instruction.

Special Storage Requirements. Optical disk storage will require approximately one linear foot in a technical manual storage cabinet, or shelf, for each CASS station.

Minimum Facilities Needed for System's Maintenance. When a pneumatics rack is added to the CASS station, the EMI filter is removed and the pneumatics rack is placed against Unit 1. The EMI filter is then transferred to the pneumatics rack.

The printer must be placed to the left of the CASS station so that the printer cable will reach the printer cable port on the station.

Twenty four inches is required on each side of the station for maintenance.

Seventy two inches from the front of the station is recommended for drawer extension, operator/maintainer work space, and drawer removal.

All CASS configurations require micro-miniature repair facilities for support of CASS assets. Existing micro-miniature repair facilities are adequate to provide this support.

CASS components are supported by OTPSs. No additional facilities are required for the maintenance of CASS.

Special Areas Required and Tactical Considerations. No special tactical considerations have been identified for CASS with the exception of the ESD controls listed as follows:

- ESD protection should be provided in accordance with current Navy policy for ESD control
- The work center should have permanent anti-static floor covering installed
- Each station should have static dissipative ESD protection mats on the deck (The mats for the deck should extend a minimum of five feet in front of the station; ESD protected work shelves should also be made available)
- Each station should have ESD protective wrist straps available for the technicians operating and maintaining CASS

Special requirements for UUTs should also be considered when planning areas for installation of CASS.

14.0 SPECIAL OR NON-STANDARD REQUIREMENTS

None exist.

APPENDIX “A”

CONSOLIDATED AUTOMATED SUPPORT SYSTEM (CASS) AN/USM-636(V) TYPE I

INTERIM SUPPORT ITEMS LISTs (ISILs)

**APPENDIX A. CONSOLIDATED AUTOMATED SUPPORT SYSTEM (CASS)
AN/USM-636(V) INTERIM SUPPORT ITEMS LIST (ISIL)**

OTPS2 COMMON INTERFACE DEVICE

	<i>G00609</i>			
PART NUMBER	NOMENCLATURE	NIIN	CAGE	SMR
011163	FAN	LL-Z99-P438	82877	PAGZZ
610103157	PIN ASSY COAX MALE	01-438-2708	18117	PAGZZ
610110145	CONTACT ELECTRICAL	LL-Z99-P441	18117	PAGZZ
610110146	PIN MALE TRI-PADDLE	01-418-8350	18117	PAGZZ
1899AS281-02	PIN POWER MALE COAX	LL-Z99-P444	18117	PAGZZ
1899AS282-02	PIN POWER MALE	LL-Z99-P445	18117	PAGZZ
2037AS208-01	GUIDE PIN RCPT	01-367-6671	30003	PAGZZ
2041AS784-01	CONNECTOR, SP, ELEC	LL-Z99-P660	30003	PAGZZ
2041AS785-01	CONNECTOR SPECIAL ELEC	LL-Z99-P432	30003	PAGZZ
2041AS786-01	CONNECTOR	LL-Z99-P433	30003	PAGZZ
2042AS358-01	CONNECTOR RECPT ELEC	01-412-1862	30003	PAGZZ
2052AS950-01	CABLE ASSY PTD FLEX	LL-Z99-P684	30003	PAGZZ
2053AS030-02	CONTACT ELECTRICAL	01-444-8651	30003	PAGZZ
2053AS214-01	CONNECTOR RECPT ELEC	LL-Z99-P435	30003	PAGZZ
2053AS646-01	FILTER AIR/EMI	LL-Z99-P436	30003	PAGZZ
2053AS648-01	SENSOR TEMPERATURE	LL-Z99-P437	30003	PAGZZ
89050-001	CONTACT ELEC CONNCETOR	LL-Z99-P447	14933	PAGZZ
M3933/16-09N	ATTENUATOR FIXED	LL-Z99-P448	81349	PAGZZ
RE80G2670	RESISTOR FIXED WW	LL-Z99-P449	81349	PAGZZ

EO

	<i>G00660</i>			
PART NUMBER	NOMENCLATURE	NIIN	CAGE	SMR
1894AS312-309	LASER ANALYSIS TEST SET ASSY	LL-Z99-K363	30003	PAGDD
1894AS315-306	AIR CURTAIN WINDOW ASSY	LL-Z99-K364	30003	PAGDD
1894AS330-304	BEAMSPLITTER WHEEL	LL-Z99-M330	30003	PAGZZ
1894AS375-302	ROTATING MIRROR	LL-Z99-F821	30003	PAGZZ
1894AS380-308	FOCAL PLANE ARRAY	LL-Z99-F824	30003	PAGDD
1894AS390-304	CCA, BLOWER INTERFACE	LL-Z99-F823	30003	PAGGD
1894AS394-301	PEDESTAL ASSY	LL-Z99-F820	30003	PAGDD
1894AS415-302	LASER ATTENUATOR MODULE	LL-Z99-N172	30003	PAGDD
1894AS652-001	EXHAUST FAN	LL-Z99-M331	30003	PAGZZ
1895AS060-306	CCA MEMORY AND FRAME	LL-Z99-F817	30003	PAGDD
1895AS480-301	CCA, FPA INTRFC	LL-Z99-F826	30003	PAGDD
1895AS490-301	CCA, LAA	LL-Z99-F828	30003	PAGDD
2051AS350-301	THERMAL IMAGE SOURCE ASSY	LL-Z99-K361	30003	PAGDD
2051AS351-301	VISUAL SOURCE ASSET ASSY	LL-Z99-K362	30003	PAGDD
2051AS401-301	CCA, FRAME STORE VIDEO PROCESS	LL-Z99-K360	30003	PAGDD
2051AS409-301	MOTOR CONTROLLER CCA	LL-Z99-K365	30003	PAGDD

DTU

	<i>G00806</i>			
PART NUMBER	NOMENCLATURE	NIIN	CAGE	SMR
2048AS464-02	CIRCUIT CARD ASSEMB	01-420-8101	30003	PAGGD
2048AS464-03	POWER SUPPLY	01-457-7822	0NNS4	PAGDD
2054AS342-01	PANEL, CONTROL, ELECT	01-457-7819	0NNS4	PAGZZ
2054AS343-01	DISK DRIVE UNIT	01-420-8090	30003	PAGDD
2054AS393-01	KEYBOARD, DATA ENTRY	01-420-8095	30003	PAGZZ
2054AS394-01	TRACKBALL, DATA ENTR	01-420-8088	30003	PAGZZ
2055AS446-01	PANEL, CONTROL, ELECT	01-420-8092	30003	PAGZZ
2055AS529-01	BACKPLANE ASSEMBLY	01-420-8106	30003	PAGDD
2055AS530-01	ELECTRONIC COMPONENT	01-420-8103	30003	PAGDD
2055AS531-01	INTERFACE UNIT, COMM	01-420-8105	30003	PAGZZ
2055AS532-01	ELECTRONIC MODULE, S	01-420-8284	30003	PAGZZ
2055AS533-01	CIRCUIT CARD ASSEMB	01-420-8102	30003	PAGZZ
2055AS534-01	ELECTRONIC COMPONENT	01-420-8104	30003	PAGZZ
2055AS535-01	DISK DRIVE UNIT	01-420-8091	30003	PAGZZ
2055AS536-01	CIRCUIT CARD ASSEMB	01-420-8108	30003	PAGZZ
2055AS537-01	POWER SUPPLY	01-420-8093	30003	PAGZZ
2055AS539-01	POWER SUPPLY ASSEMB	01-420-8089	30003	PAGDD
2055AS540-01	CIRCUIT CARD ASSEMB	01-420-8109	30003	PAGDD
2055AS541-01	POWER SUPPLY ASSEMB	01-420-8096	30003	PAGDD
2055AS542-01	CONTROLLER, DATA ENT	01-420-8097	30003	PAGDD
2055AS543-01	PRINTED CIRCUIT BOARD	01-420-8450	30003	PAGDD
2055AS544-01	BACKPLANE ASSEMBLY	01-420-8107	30003	PAGDD
2055AS617-01	DISTRIBUTION BOX	01-446-3178	30003	PAGZZ
2055AS618-01	DISTRIBUTION BOX	01-446-3180	30003	PAGZZ
2055AS809-01	CABLE ASSY, INTE	01-454-6744	30003	PAGZZ
358-796-00	PROBE, TEST	01-408-4633	23350	PAGDD
920-1612-001	DISPLAY UNIT	01-454-6730	56081	PAGDD

ANCILLARY SET

PART NUMBER	G00849	NIIN	CAGE	SMR
1894AS253-01	CONN PLUG RT ANG 300	01-410-7742	30003	PAGZZ
1895AS568-01	I.C. ASSET INTERFACE	LL-Z99-M402	30003	PAGZZ
2037AS260-02	CONNECTOR 100 PIN ST	01-410-2899	30003	PAGZZ
2037AS312-01	CONNECTOR, RECEPTACLE	01-368-3746	30003	PAGZZ
2041AS872-04	SOCKET, ARRAY	01-411-3160	30003	PAGZZ
2042AS470-06	CONNECTOR, RECEPTACLE	01-434-5099	30003	PAGZZ
2046AS008-01	MICROCIRCUIT, MEMORY	01-434-5101	30003	PAGZZ
2047AS341-01	MICROCIRCUIT, MEMORY	01-434-5102	30003	PAGZZ
2048AS367-01	PANEL, INTERFACE DEV	01-434-5394	30003	PAGGD
2055AS572-01	COIL, RADIO FREQUENCY	01-434-5105	30003	PAGZZ
2055AS588-01	OSCILLATOR, CRYSTAL	01-434-5103	30003	PAGZZ
2055AS588-02	OSCILLATOR, CRYSTAL	01-434-5104	30003	PAGZZ
445244-4	CONNECTOR, PROGRAMMED	01-411-4955	00779	PAGZZ
5962-8862101CA	MICROCIRCUIT, DIGITAL	01-306-8894	67268	PAGZZ
5962-8961501PA	MICROCIRCUIT, LINEAR	01-380-7597	67268	PAGZZ
7802901JA	MICROCIRCUIT, DIGITAL	01-144-0188	67268	PAGZZ
8004102EA	MICROCIRCUIT, LINEAR	01-116-1995	67268	PAGZZ
8401101CA	MICROCIRCUIT, DIGITAL	01-244-9586	67268	PAGZZ
8403001RA	MICROCIRCUIT, DIGITAL	01-234-9874	67268	PAGZZ
8406501JA	MICROCIRCUIT, DIGITAL	01-263-9407	67268	PAGZZ
8413501EA	MICROCIRCUIT, DIGITAL	01-240-9243	67268	PAGZZ
8413601RA	MICROCIRCUIT, DIGITAL	01-381-7577	67268	PAGZZ
8509701EA	MICROCIRCUIT, DIGITAL	01-266-0254	67268	PAGZZ
D38999/26WG35PA	CONNECTOR, PLUG, ELEC	01-147-5731	81349	PAGZZ
DS310-55D104M16V	FILTER, RADIO FREQUE	01-410-6825	51406	PAGZZ
DSS310-55Y5S223S	FILTER, RADIO FREQUE	01-410-6822	51406	PAGZZ
M38510/06302BEA	MICROCIRCUIT, DIGITAL	01-257-0564	81349	PAGZZ
M38510/10403BEX	MICROCIRCUIT, LINEAR	01-287-9495	81349	PAGZZ
M38510/10404BEA	MICROCIRCUIT, LINEAR	00-584-3996	81349	PAGZZ
M38510/32301BCA	MICROCIRCUIT, DIGITAL	01-262-7137	81349	PAGZZ
M38510/34101BCA	MICROCIRCUIT, DIGITAL	01-291-2900	81349	PAGZZ
M38510/37001BCA	MICROCIRCUIT, DIGITAL	01-249-1837	81349	PAGZZ
M38510/37006BCA	MICROCIRCUIT, DIGITAL	01-266-8049	81349	PAGZZ
M38510/37401BCA	MICROCIRCUIT, DIGITAL	01-250-5834	81349	PAGZZ
M38510/37402BCA	MICROCIRCUIT, DIGITAL	01-230-8413	81349	PAGZZ
M38510/37501BCA	MICROCIRCUIT, DIGITAL	01-233-2303	81349	PAGZZ
M38510/38001BEA	MICROCIRCUIT, DIGITAL	01-240-5629	81349	PAGZZ
M38510/38303BRA	MICROCIRCUIT, DIGITAL	01-222-3905	81349	PAGZZ
M39003/01-7052	CAPACITOR, FIXED, ELE	01-267-5793	81349	PAGZZ
M39014/01-1575	CAPACITOR, FIXED, CER	00-124-0659	81349	PAGZZ
M39014/02-1310	CAPACITOR, FIXED, CER	01-219-4856	81349	PAGZZ
M39014/05-2019	CAPACITOR, FIXED, CER	00-113-5490	81349	PAGZZ
M39014/05-2037	CAPACITOR, FIXED, CER	00-098-9281	81349	PAGZZ
M8340106K2001GC	RESISTOR NETWORK, FI	01-177-9056	81349	PAGZZ
M83734/7-013	SOCKET, PLUG-IN ELEC	01-092-0250	81349	PAGZZ
RLR05C1001GS	RESISTOR, FIXED, FILM	01-173-8931	81349	PAGZZ
RLR05C1200GR	RESISTOR, FIXED, FILM	01-176-7349	81349	PAGZZ
RLR20C1000GR	RESISTOR, FIXED, FILM	00-926-8706	81349	PAGZZ
XC3090-70PG175M	MICROCIRCUIT, DIGITAL	01-434-5106	65994	PAGZZ

EOSS TEST SET

	<i>G00855</i>			
PART NUMBER	NOMENCLATURE	NIIN	CAGE	SMR
031645	FAN, VENTILATING	01-436-1141	0CY92	PAGZZ
1894AS060-307	CHASSIS, ELECTRICAL	01-445-0350	30003	PAGDD
1894AS763-002	FILTER, LIGHT, GENERAL	01-445-0182	30003	PAGZZ
1894AS912-301	FAN, VENTILATING	01-436-1133	30003	PAGZZ
1894AS954-302	CABLE ASSEMBLY, SPEC	01-436-1135	30003	PAGZZ
1895AS060-306	CCA MEMORY & FRAME	LL-Z99-F817	30003	PAGDD
1895AS568-03	MICROCIRCUIT, MEMORY	01-448-1055	30003	PAGZZ
1896AS501-06	POWER SUPPLY	01-456-8403	30003	PAGDD
2034AS373-01	CABLE ASSEMBLY, SPEC	01-436-1134	30003	PAGZZ
2038AS676	RECORDER ASSEMBLY	01-436-1136	30003	PAGZZ
2051AS393-301	CIRCUIT CARD ASSEMBLY	01-436-1151	30003	PAGDD
2051AS401-301	CCA, FRAME STORE VIDEO PROCESS	LL-Z99-K360	30003	PAGDD
2051AS401-304	CCA	01-445-0222	30003	PAGDD
2054AS803-001	RECORDER SUB ASSEMBLY	01-436-1138	30003	PAGDD
2054AS804-001	RECORDER SUB ASSEMBLY	01-436-1137	30003	PAGDD
2054AS805	RECORDER SUB ASSEMBLY	01-436-1139	30003	PAGDD
2054AS806-301	PANEL, ELECTRICAL-EL	01-454-6723	30003	PAGDD
2054AS807-004	RECORDER SUB ASSEMBLY	01-436-1140	30003	PAGDD
2055AS308-301	CASE, OPTICAL INSTRU	01-436-1173	30003	PAGDD
2055AS334-301	RESISTOR, THERMAL	01-456-8401	30003	PAGZZ
2055AS351-302	CIRCUIT CARD ASSEMBLY	01-436-1144	30003	PAGZZ
2055AS352-301	CIRCUIT CARD ASSEMBLY	01-436-1149	30003	PAGZZ
2055AS353-301	CIRCUIT CARD ASSEMBLY	01-436-1145	30003	PAGZZ
2055AS354-302	CIRCUIT CARD ASSEMBLY	01-436-1146	30003	PAGZZ
2055AS355-301	CIRCUIT CARD ASSEMBLY	01-436-1150	30003	PAGZZ
2055AS356-301	CIRCUIT CARD ASSEMBLY	01-436-1143	30003	PAGZZ
2055AS358-301	REGULATOR, CURRENT	01-436-1131	30003	PAGZZ
2055AS360-301	CIRCUIT CARD ASSEMBLY	01-436-1148	30003	PAGZZ
2055AS361-303	CIRCUIT CARD ASSEMBLY	01-436-1153	30003	PAGDD
2055AS362	MODULE	01-456-8400	30003	PAGDD
2055AS362-302	CIRCUIT CARD ASSEMBLY	01-436-1154	30003	PAGDD
2055AS363-301	ELECTRONIC COMPONENT	01-436-1171	30003	PAGZZ
2055AS364-301	CIRCUIT CARD ASSEMBLY	01-436-1147	30003	PAGZZ
2055AS367	ELECTRONIC COMPONENT	01-454-6742	30003	PAGDD
2055AS367-XXXX	CHASSIS, ELECTRICAL	01-454-6727	30003	PAGDD
2056AS139-01	PROCESSOR, SIGNAL DA	01-454-6729	30003	PAGDD
2056AS140-01	ETHERNET HUB	01-456-8402	30003	PAGZZ
2056AS362-01	SLOT O CONTROLLER	01-456-9478	30003	PAGDD
400-474	LIGHT, INDICATOR	01-445-0181	22915	PAGZZ
7052-01-A05S	RELAY, SOLID STATE	01-454-6732	22915	PAGZZ
LE612A	CONVERTER, SIGNAL DA	01-454-7670	22915	PAGZZ
Z2532-60001	POWER SUPPLY	01-456-8407	14493	PAGZZ

COMMIF

	<i>G00949</i>			
PART NUMBER	NOMENCLATURE	NIIN	CAGE	SMR
1897AS677-015	MICROCIRCUIT, LINEAR	01-457-7499	30003	PAGZZ
1897AS677-016	MICROCIRCUIT, LINEAR	01-457-7500	30003	PAGZZ
2055AS694-01	MICROCIRCUIT, LINEAR	01-457-7501	30003	PAGZZ

ASSET CONTROLLER

	<i>G00950</i>			
PARTNUMBER	NOMENCLATURE	NIIN	CAGE	SMR
2056AS164-01	CONTROLLER, TEST, ELE	01-457-7608	0NNS4	PAGDD

OFF-LINE READER SYSTEM

	<i>G02002</i>			
PART NUMBER	NOMENCLATURE	NIIN	CAGE	SMR
82-PB411-AA	COMPUTER, TEST DATA	01-412-7666	15476	PAGDD
BN19B-1K	CABLE POWER ELECTRI	01-428-9932	15476	PAGZZ
BN21R-01	CABLE ASSY, SPEC	01-428-9931	15476	PAGZZ
BRS61D	TRACKBALL, DATA ENTRY	01-412-7667	0VTM4	PAGZZ
LK401	KEYBOARD, MACHINE, MO	01-400-3949	15476	PAGZZ
LK450-AA	KEYBOARD, MACHINE, MO	01-415-1835	15476	PAGZZ
RWZ52-FA	DISK DRIVE UNIT	01-412-7669	15476	PAGDD
VRT17-PA	DISPLAY UNIT	01-412-7665	15476	PAGZZ

APPENDIX “B”

INTERIM SUPPLY SUPPORT (ISS) PROGRAM

REQUISITIONER'S HANDBOOK

**REVISED
JUNE 1997**

APPENDIX B. INTERIM SUPPLY SUPPORT (ISS) PROGRAM
REQUISITIONER'S HANDBOOK

TABLE OF CONTENTS

SECTION I - Introduction

1. Overview	B-1
2. Program Summary	B-1
3. Documentation	B-1
4. Points of Contact	B-1

SECTION II - Identification of ISS Material

1. Overview	B-2
2. Material Identification	B-2
3. Management Aids	B-2

SECTION III - Squadron/Aviation Intermediate Maintenance Department (AIMD) Procedures

1. Material Requisitioning Procedures	B-3
2. Supply Issue	B-3
3. Part Numbered Requirements	B-3

SECTION IV - Supply Department Procedures

1. Allowance Processing	B-4
2. NALCOMIS Tape	B-4
3. Stock Material Receipt	B-4
4. Material Requisitioning Procedures	B-4
5. Issues	B-4
6. Not in stock (NIS)/Not Carried (NC) Requirements	B-4
7. Stock Replenishment	B-5
8. Retrograde Movement	B-5
9. Cross-Decking of ISS Material	B-5
10. Funding	B-5
11. Allowance Change Requests	B-5
12. MILSTRIP Requisition Format	B-5
13. Maintenance Assistance Modules (MAMs)/Test Bench Installations	B-5
14. Material Obligation Validation (MOV)	B-6
15. Remain-in-Place (RIP)	B-6
16. Shipping Container Information	B-6
17. Turn-in of "A" Condition Material	B-6
18. NAVAIR Logistics Support Center	B-6
19. ISS Facilities	B-6
20. Requisition Stock Status	B-6

SECTION V - Glossary	B-7
----------------------------	-----

SECTION VI - POCs	B-8
-------------------------	-----

SECTION I **INTRODUCTION**

1. Overview. The Naval Inventory Control Point (NAVICP) has established procedures for material management under the Interim Supply Support (ISS) program. These are based on standard supply procedures used to support post Material Support Date (MSD) systems and equipment.
2. Program Summary. Retail allowances of interim spares in support of weapon systems/SE are established by NAVICP. These allowances are transmitted to the appropriate TYCOM for inclusion in the activity's inventory records. The activity requisitions stock and direct turnover (DTO) material using Military Standard Requisitioning and Issue Procedures (MILSTRIP) via the Defense Automated Addressing System (DAAS). The activity receives, stocks, issues, and accounts for the material in the same manner as National Stock Number (NSN) material. Wholesale (back-up) interim support assets are maintained in ISS Facilities.
3. Documentation. This instruction details ISS policy, procedures, and responsibilities for all activities involved in aviation supply support. This handbook is intended as a step-by-step reference guide to familiarize aviation support personnel with the procedures for identifying ISS material, requisitioning ISS material, and disposition of retrograde ISS material.
4. Points of Contact. The NAVICP ISS Coordinator is Code 36L, DSN 442-2100, Commercial (215) 697-2100. Other points of contact are NAVICP, Code 3611, DSN 442-3035 and the TYCOMs (COMNAVAIRLANT Code N412B, COMNAVAIRPAC Code 434, COMNAVSURFLANT Code N7, COMNAVSURFPAC Code N713A, and COMNAVRESFOR Code 72).

SECTION II **IDENTIFICATION OF ISS MATERIAL**

1. Overview. ISS material procured by NAVICP which has not been assigned an NSN (i.e. part numbered material) is identified by an Interim Navy Item Control Number (I-NICN). I-NICNs are assigned to ISS material by NAVICP and will be used in the same manner as NSNs for all control and documentation purposes. The unique I-NICNs for ISS material are the 0098-LL-Z98-___ series for aviation weapon systems and 0098-LL-Z99-___ series for SE. Repairables are assigned 0R cognizance symbol and consumables are assigned 0Q cognizance symbol. As of 1 April 1995, NAVICP began assigning Early NSNs (E-NSN) in lieu of I-ICNs for most systems. There will be limited situations where the I-NICN will be assigned. The E-NSN will look the same as a regular NSN except that an 0R or 0Q cog will be assigned.
2. Material Identification. ISS material is labeled with the assigned I-NICN/E-NSN cognizance symbol, and nomenclature. Appropriate information on ISS material is included in the activity (Shipboard) Uniform Automated Data Processing System ((S)UADPS) Master Record Files and the Naval Aviation Logistics Command Management Information System (NALCOMIS) files.
3. Management Aids. A number of management aids exist to assist operational sites in using ISS. NAVICP is responsible for ensuring ISS information is promulgated to Fleet units.
 - a. ISS Management Data Microfiche. This microfiche is distributed quarterly from the NAVAIR Logistics Support Center to all activities that maintain aviation weapon systems and end items of SE. It is comprised of five sections (1) general information; (2) part number to I-NICN cross reference; (3) I-NICN to part number cross reference; (4) repairables shipping data list; (5) repairables shipping instructions; (6) Interim Support Item List (ISIL) to end item identification. Figures 1 through 6 are samples of each of the five sections.
 - b. ISS Systems Catalog. The ISS Systems Catalog (Header File) is published by NAVAIR Logistics Support Center (LSC). This file lists all ISS systems under NAVICP cognizance. The catalog is used as a verification tool for site ISAL development and maintenance and is distributed to type commanders (TYCOMs) via Streamlined Alternative Logistics Transmission System (SALTS). The file is updated on a regular basis and is available to other activities upon request. Figure 7 is a sample page from the Header File.
 - c. Naval Aviation Logistics Command Management Information System (NALCOMIS). A NALCOMIS part number to I-NICN/E-NSN cross reference file is distributed by the NAVAIR Logistics Support Center via the appropriate TYCOM for inclusion in an activity's NALCOMIS database. This product is provided on an 8" magnetic tape.
 - d. Master Repairable Item List (MRIL). NAVICP provides designated overhaul point (DOP)/designated repair point (DRP) information to the Fleet Material Support Office (FMSO) for publication in the MRIL.

SECTION III
SQUADRON/AVIATION INTERMEDIATE
MAINTENANCE DEPARTMENT (AIMD) PROCEDURES

1. Material Requisitioning Procedures. When a site experiences a failure of a part required to repair a piece of equipment that is under ISS, the following actions must be taken:

- a. Technician obtain part number and other information pertaining to the failed item.
- b. Submit requirements to the supporting supply department per established procedures. Clearly mark the requirement as "ISS" and ensure part numbered requirements contain all applicable information.

2. Supply Issue. If the part is available at local supply, an issue will be made from stock. If not available, the supply department will order the material per Section IV of this Handbook. The requiring activity will track ISS requisitions in the same manner as other material requisitions.

3. Part Numbered Requirements. Maintenance technicians may not always identify a requirement as being part of an ISS system. Therefore, it is very important that requiring activities' material control department determine if a part belongs to an ISS equipment. This will help ensure that all part numbered requisitions transmitted to the supporting supply activity are properly coded as "ISS" for submission to NAVICP. If a part numbered requirement is not identified as ISS, delays in processing the requisition may occur.

SECTION IV
SUPPLY DEPARTMENT PROCEDURES

1. Allowance Processing. ISS site allowances for interim spares are promulgated as Interim Support Allowance List (ISAL) from NAVICP. These allowances (both initial and splinter) are in the same format and medium as AVCAL/SHORCAL allowance information (i.e. (S)UADPS or DOSS formats). NAVICP includes specific processing instructions and stock ordering procedures with the allowance product. Special allowance changes which cannot wait for the next scheduled NAVICP cycle are issued via Naval message or SALTS; these changes are limited to less than 50 items. The message contains all information necessary for the receiving activity to enter the ISAL add/change/delete action into their supply and maintenance databases. ISS aircraft carrier (CV), L-class ship, Marine Aviation Logistics Squadron (MALS) and Naval Air Station (NAS) allowances will be promulgated as an ISAL from NAVICP either directly to the site or via the appropriate TYCOM.
2. NALCOMIS Tape. In conjunction with the ISAL products, each site receives an initial NALCOMIS database tape that contains part number to I-NICN/E-NSN cross reference. This tape is to be loaded per standard NALCOMIS operating procedures.
3. Stock Material Receipt. ISAL material is normally received from an ISS Facility via the Defense Transportation System (DTS). Material is receipted for and stocked in the same manner as other allowance material. The activity Supply Officer retains the same level of accountability for interim supply support material that is held for NSN material.
4. Material Requisitioning Procedures. Supply Department personnel will enter the part number into NALCOMIS in order to obtain the I-NICN/E-NSN for the required item. If no I-NICN/E-NSN is obtained through NALCOMIS or NALCOMIS is not available, the ISS Management Data Microfiche should be used to attempt to obtain an I-NICN/E-NSN.
5. Issues. Issues of ISS stock material are accomplished following standard stock issue procedures.
6. Not in stock (NIS)/Not Carried (NC) Requirements. When the supporting supply activity receives a requirement for NIS/NC material, the following procedures are followed:
 - a. I-NICN/NSN. I-NICN/E-NSN requirements are submitted as MILSTRIP requisitions to NAVICP via DAAS. NAVICP processes the requisition and takes appropriate supply action. Supply/shipping status is provided to the requisitioner via DAAS.
 - b. Part Numbered Requirement. Part numbered requirements for systems under ISS are submitted as A05/A0E MILSTRIP requisitions via message to NAVICP. The subject line of the message cites the words "ISS Part Numbered Requisition". The requisition's remarks indicates

all pertinent information normally required for part numbered requisitions and will also indicate the SML number, if known. It is also important to include the next higher assembly, nomenclature and part number. NAVICP provides the appropriate supply/shipping status to the requisitioner. (Do not cite RIC R43 for part numbered requisitions as the NAVAIR Logistics Support Center does not process these requirements.)

7. Stock Replenishment. Stock replenishment requisitions for ISS material are submitted as MILSTRIP requisitions to NAVICP via DAAS for appropriate supply action.

8. Retrograde Movement. All ISS I-NICN/E-NSN repairables are identified in the MRIL and ISS Management Data Microfiche. ISS depot level repairables (DLRs) are accounted for and retrograded in the same manner as NSN DLRs. NAVICP receives DLR transaction item reports (TIRs). Additionally, a copy of the DD Form 1348-1 is sent from the turn-in activity to the address indicated in the MRIL. Part numbered items suspected of being repairable are held until specific instructions for turn-in or disposal are received from the NAVICP inventory manager. Standard supply procedures for repairable retrograde turn-in are followed. Ensure item is properly packaged to prevent damage during transit to the designated overhaul point (DOP). Ship in accordance with the information provided in the MRIL via the ATAC Hub.

9. Cross-Decking of ISS Material. Cross-decking of ISS material occurs when an activity is unable to satisfy an urgent ISS requirement. The NAVICP inventory manager/ISS Facility/appropriate TYCOM coordinates cross-deck efforts. The transferring activity submits a normal stock replenishment requisition and the receiving activity cancels their outstanding requisition.

10. Funding. All MILSTRIP requisitions for ISS material must cite a fund code. Refer to Figure 8 for specific fund code procedures.

11. Allowance Change Requests. The Allowance Change Request-Fixed (ACR-F) is the vehicle for the Fleet to recommend a revision to authorized fixed allowance levels. ACR-Fs are submitted when the current allowance quantity does not appear to be sufficient to support the activity's present and continuing maintenance mission. ACR-Fs for allowance decreases are also encouraged. ACR-Fs for ISAL allowance changes are submitted to the appropriate NAVICP inventory manager via the TYCOM on form NAVSUP 1375, Allowance Change Request-Fixed or via Naval message.

12. MILSTRIP Requisition Format. Requisitions and follow-ups are submitted in standard MILSTRIP format. Non-compliance with submittal in the correct format may result in requisition cancellation.

Example:

A04N32S0098LLZ98C806B4EA00001R212971210G719RYS6707DY6 0R9BU029995G

13. Maintenance Assistance Modules (MAMs)/Test Bench Installations (TBIs). MAMs/TBIs are procured by NAVICP in support of SE. Allowances for MAMs/TBIs will be included in the ISAL quantity. When the ISAL is provided, a separate listing indicates allowance quantities for

MAMs/TBIs. Custody and BCM procedures are the same as for non-ISS material.

14. Material Obligation Validation (MOV). NAVICP initiates MOVs in accordance with standard procedures. Standard procedures apply to outstanding I-NICN/E-NSN requisitions.

15. Remain-in-Place (RIP). Due to the nature of ISS, it is unlikely that enough assets will be available in the system to satisfy all allowances and installations at any particular time. Procurement of pipeline spares (those procured to cover the time an non-RFI asset is in transit from the activity to the DOP, repaired, and returned to the system) is not authorized during the ISS period, thereby necessitating a reliance on expeditious turn around times. Therefore, remain-in-place of ISS material is generally not authorized. If adequate spares are available, RIP may be authorized by NAVICP. If the activity Supply Officer believes RIP is justified, the activity must send a message to NAVICP (Code 3413) requesting the asset be RIP until receipt of an RFI unit. However, it must be understood that often the only asset available to fill the requirement is the same one that is non-RFI onboard.

16. Shipping Container Information. Shipping container information for all OR cog ISS material is available in the MRIL. Shipping containers are to be requisitioned through the supply system for those items delivered without one.

17. Turn-in of "A" Condition Material. "A" condition material in excess of allowances is to be turned in to the closest ISS Facility as indicated in Figure 9. Material onboard when a system reaches Material Support Date (MSD) must be identified to the proper NSN. NAVICP will provide disposition instructions for post-MSD items that are not assigned NSNs.

18. NAVAIR Logistics Support Center. The NAVAIR Logistics Support Center is located in Crystal City, Arlington, VA. It is a company, Dimensions International, Inc., under direct contract to the Navy. The Support Center processes referral requisitions received from NAVICP and passes them to the appropriate ISS Facility for shipping action. (The Support Center uses RIC "R43").

19. ISS Facilities. Two ISS Facilities are presently in operation. They are warehouses on military bases owned by the government but operated by contractor personnel (Dimensions International). The two facilities are located at NAS North Island, Building 652 Bay 6, and at MCAS Beaufort, Building 612 Bay 12. See Section VI for full address, points of contact, and telephone numbers.

20. Requisition Stock Status. Requisition and stock availability status may be obtained from the NAVICP computer using standard procedures. Follow-ups should be directed to the NAVICP inventory manager. High priority requirements may be called in to the NAVICP hotline.

SECTION V
GLOSSARY

1. Advance Traceability and Control (ATAC) System. A management system whereby depot level repairable (DLR) retrograde is forwarded to hubs on each coast for positive identification and forwarding to the appropriate repair site to await induction for repair.
2. Aviation Consolidated Allowance List (AVCAL). The AVCAL is a retail requirements package which provides the range and depth of aviation material that ships and Marines Aviation Logistics Squadrons (MALS) are authorized to carry to support maintenance actions that are anticipated during work up and actual deployment. The fixed allowance requirements published in the AVCAL have been negotiated between NAVICP, the cognizant TYCOM and the using activity.
3. Depot Level Repairable (DLR). A repairable item of supply that may be repaired at designated levels of maintenance, but can be condemned only at the depot level, or at the direction of the depot maintenance activity.
4. Interim Navy Item Control Number (I-NICN). A unique control number established for new development spare and repair parts during the ISS period to be used by operational sites for MILSTRIP requisitioning and other supply management functions.
5. Interim Spare and Repair Parts. The secondary items provided during the interim support period by NAVICP.
6. Interim Supply Support (ISS). The supply and inventory management support of new or modified weapon systems and SE provided by NAVICP from fleet introduction to transition to Government support at MSD.
7. Interim Support Allowance List (ISAL). A listing of all designated I-NICN spare and repair parts (similar to a AVCAL or SHORCAL) required to support ISS equipment at an operational site.
8. SML Header File. A catalog composed of all interim support systems managed under ISS.
9. Master Repairable Item List (MRIL). Catalog of repairable items published monthly by FMSO in two forms, mechanized and microfiche, in order to facilitate the retrograde movement of DLRs and Field Level Repairables (FLRs).
10. Material Support Date (MSD). The date when the supply support for all spare and repair parts of a new weapons system or SE transitions from ISS to the Government supply system.
11. ISS Management Data Microfiche. A set of microfiche which contain information pertaining to the supply management of ISS spare and repair parts. It is distributed to activities using aviation ISS material
12. Transition. The point at which interim spare and repair parts are turned over to the Government supply system, usually at MSD. Transition of an equipment is coordinated between NAVAIR and NAVICP.

SECTION VI
POCS

NAVAIR LOGISTICS SUPPORT CENTER (RIC-R43)
SUITE 509 CRYSTAL GATEWAY 2
1225 JEFFERSON DAVIS HWY
ARLINGTON, VA. 22202
AUTOVON 664-1470
COMM #(703) 416-5020
FAX# (703) 416-5026
MR. JIM INMAN (ISS PGM MGR)

DODAAC/UIC N46588
NAVAIR ISS FACILITY
BLDG. 652, BAY 6
NAS NORTH ISLAND
SAN DIEGO, CA 92135

AUTOVON 735-9766/68
COMM# (619) 545-9766/68

MR. TED LAMPARTER
(SITE MANAGER)
CALIBRATION STANDARDS
AND WAREHOUSE STAFF

FAX# (619) 545-9764

ODAAC/UIC N48535
NAVAIR ISS FACILITY
BLDG. 612, BAY 12
MCAS BEAUFORT
BEAUFORT, SC. 29904

AUTOVON 832-7388
COMM#*(803) 522-3900/3909

MR. DAVE OSSMAN
(SITE MANAGER)
CALIBRATION STANDARDS
AND WAREHOUSE STAFF

FAX# (803) 522-9890

APPENDIX “C”

SUPPORT EQUIPMENT

APPENDIX C. SUPPORT EQUIPMENT

SOS OTPS #2

SERD	PART NUMBER	NOMENCLATURE	CONFIG	PEC/	SM&R	NSN
				COM	CODE	
1011	2051AS610-01	COMMON INTERFACE DEVICE	ALL-I	PEC	PEGGD	2V-D-6625-01-374-4938
1012	2052AS593-01	MINOR ADAPTER A206	ALL-I	PEC	PEGGD	2V-X-6625-01-406-2617
1013	2052AS594-01	MINOR ADAPTER A203	ALL-I	PEC	PEGGD	2V-X-6625-01-406-2614
1014	2052AS595-01	MINOR ADAPTER A205	ALL-I	PEC	PEGGD	2V-X-6625-01-406-2640
1015	2052AS596-01	MINOR ADAPTER A201	ALL-I	PEC	PEGGD	2V-X-6625-01-406-2611
1016	2052AS597-01	MINOR ADAPTER A204	ALL-I	PEC	PEGGD	2V-X-4920-01-406-2616
1017	2052AS598-01	MINOR ADAPTER A202	ALL-I	PEC	PEGGD	2V-X-6625-01-406-2613
1019	2051AS627-01	SELF-TEST ACCESSORY SET	ALL-I	PEC	PEGGD	2V-X-4920-01-374-1249
1020	2052AS613-01	CABLE SET	ALL-I	PEC	PEGGG	2V-X-6150-01-406-4960
1027	2052AS620-01	SELF-TEST ACCESSORY SET	ALL-I	PEC	PEGGD	2V-X-6625-01-406-4962
1034	2053AS340-OTPM	SOS OTPS 2 PROGRAM DISK	ALL-I	PEC	MDGZA	2V-W-0000-LL-SWE-3932
1036	2053AS573-01	ADAPTER SET	ALL-I	PEC	PEGGG	2V-W-6625-01-410-9894
1045	2053AS575-01	LOAD SET	ALL-I	PEC	PEGGG	2V-X-5985-01-406-4957
1136	2053AS010-OTPM	COMMON ID PROGRAM DISK	ALL-I	PEC	MDGZA	2V-W-0000-LL-SWE-3931
1137	2053AS574-01	FIXTURE SET	ALL-I	PEC	PEGGG	2V-X-6625-01-406-4961
1161	2053AS340-MTPSI	MTPSI DECK SOS OTPS 2	ALL-I	PEC	MDGZZ	2V-W-0000-LL-SWE-4135

*Note: SERD #1011, 1010 and 1136 are used in both SOS OTPS #1 and SOS OTPS #2.

SMAT SOS OTPS

5025	2042AS006-02	SMAT INTERFACE DEVICE	ALL	PEC	PEGGD	6R-X-4920-LL-ERF-2364
0015	2043AS303-01	SMAT CABLE SET	ALL	PEC	PEGGG	6R-D-6150-01-360-8204-A9
0016	2047AS258-01	SMAT ADAPTER SET	ALL	PEC	PEGGG	6R-D-4920-01-360-8216-TX
1158	2045AS063-MTPSI	MTPSI DECK SMAT OTPS	ALL	PEC	MDGZZ	2V-W-0000-LL-SWE-4154

CAL SOS OTPS

5026	2042AS005-02	INTERFACE DEVICE, CAL	ALL	PEC	PEGGD	6R-X-4920-LL-ERF-2448
0010	2043AS302-01	CABLE SET, CAL OTPS	ALL	PEC	PEGGG	6R-D-6150-01-360-8203-A9
0013	2043AS649-01	CALIBRATION ADAPTER SET	ALL	PEC	PEGGG	6R-D-4920-01-384-6556-A9
0116	2046AS337-01	CALIBRATION LOAD SET	ALL	PEC	PEGGD	6R-X-6150-01-361-3053-A9
1131	1901AS999-OTPM	CALIBRATION PROGRAM DISK	ALL	PEC	MDGZA	2V-W-0000-LL-SWE-3911
1159	1901AS999-MTPSI	MTPSI DECK CAL OTPS	ALL	PEC	MDGZZ	2V-W-0000-LL-SWE-4153

SE USED WITH CAL/SMAT OTPS (PECULIAR)

0086	8487A	POWER SENSOR	RF/CNI	PEC	PAGZZ	2V-W-6625-01-321-1557
0090	OJB	PLANAR CROWN TO N MALE	RF/CNI	PEC	PAGZZ	1R-W-5935-01-370-1837
0091	OJF	PLANAR CROWN TO 3.5 MALE	RF/CNI	PEC	PAGZZ	1R-W-5935-01-362-8454
0093	OJK	PLANAR CROWN TO 2.4MM	RF/CNI**	PEC	PAGZZ	1R-W-5935-01-367-5051
0096	11903D	2.4MM TO TYPE N ADAPTER	RF/CNI *	PEC	PAGZZ	1R-W-5935-01-367-5052
0104	8493C/OPT. 30	30 DB ATTENUATOR	RF/CNI	PEC	PAGZZ	1R-W-5985-01-367-7063
0131	11903C	2.4MM(M) TO TYPE-N (F)	RF/CNI**	PEC	PAGZZ	1R-W-5935-01-367-5053
0133	1250-1750	3.5MM(M) TO TYPE-N(F)	ALL	PEC	PAGZZ	1R-W-5935-01-183-3408
0168	FBOHGOHGO38-0	PLANAR CROWN CABLE	RF/CNI	PEC	PAGZZ	1R-W-6150-01-369-2103
1056	1250-1787	SMA(M) TO BNC(M)	ALL **	PEC	PAGZZ	1R-W-5935-01-369-2100
1060	10833A	HPIB CABLE	ALL **	PEC	PAGZZ	9G-5995-01-124-9989
1085	11901D	2.4MM TO APC-3.5 ADAPTER	RF/CNI**	PEC	PAGZZ	1R-W-5935-01-375-6456

SE USED WITH CAL/SMAT SOS OTPS (COMMON)

0137	1250-1743	ADAPTER, CONNECTOR	RF/CNI**	COM	PAGZZ	9N-5935-01-183-3406
0138	2249-C-48	PATCH CORD	ALL	COM	PAGZZ	9G-5995-00-724-4232
1055	1250-0780	ADAPTER, OSM	ALL	COM	PAGZZ	9N-5935-00-259-0205
1057	4119-50	DUMMY LOAD	ALL **	COM	PAGZZ	9N-5985-01-080-7338
1059	5085	DUMMY CONNECTOR	ALL **	COM	PAGZZ	9N-5935-01-255-3937
5019	760-1753	N (F) TO BNC (M)	ALL **	COM	PAGZZ	9N-5935-01-095-6418
1074	1296	SCOPE ADAPTER	ALL	COM	PAGZZ	9N-5935-00-410-1399
1102	1250-1744	ADAPTER, CONNECTOR	RF/CNI *	COM	PAGZZ	9N-5935-01-104-3940
1103	909D	DUMMY LOAD	RF/CNI *	COM	PAGZZ	9N-5985-01-235-5413
1105	8022A1	ADAPTER, CONNECTOR	RF/CNI *	COM	PAGZZ	9N-W-5935-01-338-7240
1115	3282-2241-00	ADAPTER, OSM	ALL **	COM	PAGZZ	9N-5935-00-024-0612

* Used with SMAT only

**Used with CAL only

CALIBRATION EQUIPMENT FOR PFG- aligned under CALIBRATION in AUTOSERD

1356	6220-0019-CS	PRESSURE GAGE 19 PSIA	ALL	PEC	PAGDD	2V-X-0000-LL-STD-1396
1357	6220-0050-CS	PRESSURE GAGE 50 PSIA	ALL	PEC	PAGDD	2V-X-0000-LL-STD-1406
2213	SS4CPA2-3W/ORS-CS	28.5 PSI RELIEF VALVE	ALL	PEC	PAGZZ	2V-D-0000-LL-STD-2268
2214	SS4CPA2-50W/ORS-CS	75.0 PSI RELIEF VALVE	ALL	PEC	PAGZZ	2V-D-0000-LL-STD-2267
2215	CHI-1CAL-CS	PRESSURE HOSE	ALL	PEC	PAGZZ	2V-D-0000-LL-STD-2266
2216	CHI-2CAL-CS	PRESSURE HOSE	ALL	PEC	PAGZZ	2V-D-0000-LL-STD-2265

CAL STANDARDS (PECULIAR)- aligned under CALIBRATION in AUTOSERD

3029	742A-1-CS	RESISTANCE STANDARD	ALL	PEC	PAGZZ	2V-W-0000-LL-STD-1361
3030	742A-10K-CS	RESISTANCE STANDARD	ALL	PEC	PAGZZ	2V-W-0000-LL-STD-1350
1416	8487A-CS	POWER SENSOR	RF/CNI	PEC	PAGZZ	2V-W-0000-LL-STD-1526
1350	8493COPT030-CS	30 DB ATTENUATOR	RF/CNI	PEC	PAGZZ	2V-X-0000-LL-STD-1401
1012	11667B-CS	POWER SPLITTER	ALL	PEC	PAGZZ	2V-W-0000-LL-STD-0849
1349	4920M-CS	A.C. MEASUREMENT STANDARD	ALL	PEC	PEGDD	2V-X-0000-LL-STD-1402
1717	8902AOPT002-CS 8901B (ALT.)	MEASURING RECEIVER	RF/CNI RF/CNI	PEC	PEGDD	2V-X-0000-LL-STD-1748
1540	5300-S3412-CS	SIMULATOR SYNCHRO	RF/CNI/ EO	PEC	PEGDD	2V-X-0000-LL-STD-1643

CAL STANDARDS (COMMON)-aligned under CALIBRATION in AUTOSERD

0636	436A OPT22-CS	POWER METER	ALL	COM	PEGDD	2V-X-0000-LL-STD-0197
0828	8482A-CS	POWER SENSOR	ALL	COM	PEGDD	2V-X-0000-LL-STD-0565
3028	6060B-488-CS	SIGNAL GENERATOR	ALL	COM	PEGDD	2V-X-0000-LL-STD-1349
0400	11683A-CS	RANGE CALIBRATOR	RF/CNI	COM	PEGGG	2V-W-0000-LL-STD-0716
1417	732B-CS	DC REFERENCE STANDARD	ALL	COM	PEGDD	2V-W-0000-LL-STD-1525

TOOLS (PECULIAR)

0002	910104118	CRIMP POSITIONER	ALL	PEC	PAGZZ	2V-W-5120-01-389-6518
0003	910121126	FORMING TOOL, OUTER	ALL	PEC	PAGZZ	2V-W-5120-01-389-6526
0029	910110102	CONTACT PIN EXTRACT TOOL	ALL	PEC	PAGZZ	1R-W-5120-01-360-8324-A9
0030	910112104	MINI COAX & MINI POWER	ALL	PEC	PAGZZ	1R-W-5120-01-361-3067-A9
0032	910104116	CRIMP POSITIONER	ALL	PEC	PAGZZ	1R-W-4920-01-376-5054
0044	1000014	10X10 PGA EXTRACT TOOL	ALL	PEC	PAGZZ	1R-W-5120-01-379-0741-A9
0053	1000019	15X15 PGA EXTRACT TOOL	ALL	PEC	PAGZZ	1R-W-5120-01-380-4578-A9
0054	1000048	16X16 PGA EXTRACT TOOL	ALL	PEC	PAGZZ	1R-W-5120-01-378-5840-A9
0065	113	24/28 PIN DIP EXTRAC TOOL	ALL	PEC	PAGZZ	1R-W-4920-01-381-2363-A9
0066	167	15X15 PGA INSERTION TOOL	ALL	PEC	PAGZZ	1R-W-5120-01-378-0512-A9
0067	168	16X16 PGA INSERTION TOOL	ALL	PEC	PAGZZ	1R-W-5120-01-378-3448-A9
0068	203	24/28 PIN DIP EXTRAC TOOL	ALL	PEC	PAGZZ	1R-W-5120-01-360-7290-A9
0070	162	10X10 PGA INSERTION TOOL	ALL	PEC	PAGZZ	1R-W-5120-01-378-9328-A9
0072	6126-978	CCA EXTRACTION TOOL	ALL	PEC	PAGZZ	1R-W-5998-01-382-8834-A9
1114	854-605-01	DTU CARD PULLER	ALL	PEC	PAGZZ	2V-W-5120-01-389-4279
1117	910101115	CRIMP TOOL, HEX	ALL	PEC	PAGZZ	1R-W-5120-01-375-5921-A9
1118	910121131	WEIGHT GAGE SET	ALL	PEC	PAGZZ	1R-W-5220-01-397-8015-A9
1119	910121143	RESIZING TOOL, FEMALE	ALL	PEC	PAGZZ	1R-W-5120-01-397-8014-SX
1121	910121142	ENLARGING TOOL, OUTER	ALL	PEC	PAGZZ	2V-W-5120-01-389-6512
1122	910121155	WEIGHT GAGE SET	ALL	PEC	PAGZZ	2V-W-5280-01-389-9729
1124	2054AS262-01	ALIGNMENT TOOL	ALL	PEC	PAGZZ	1R-W-5120-01-406-3437-A9
1126	85054-60024	GAGE SET, TYPE-N	ALL	PEC	PAGZZ	1R-W-5220-01-406-3435-A9
1127	A027A	GAGE SET, SMA	ALL	PEC	PAGZZ	1R-W-5220-01-408-2063-A9
1129	8710-1765	TORQUE WRENCH	ALL	PEC	PAGZZ	9Q-5120-01-342-9306

TOOLS (COMMON)

0001	910101103	CRIMPING TOOL, TERMINAL	ALL	COM	PAGZZ	1R-W-5120-01-368-9121-A9
0004	910104107	CRIMPING TOOL DIE	ALL	COM	PAGZZ	1R-W-5120-01-369-1506-SX
0035	910121119	CONDUCTOR FORMING TOOL	ALL	COM	PAGZZ	1R-W-5120-01-360-8224-A9
1116	910101102	CRIMPING TOOL, TERMINAL	ALL	COM	PAGZZ	1R-W-5120-00-421-5822-A9
1128	A034B	GAGE, CONTACT ELECTRICAL	ALL	COM	PAGZZ	1R-W-5220-01-334-5965-SX
1130	8710-1582	TORQUE WRENCH	ALL	COM	PAGZZ	1R-W-5120-01-342-9307-A9

CASS MAINTENANCE AND HANDLING EQUIPMENT (PECULIAR)

0078	GKSK-1990-29	STATION DOLLY	ALL	PEC	PFDDD	2V-X-0000-LL-PFS-4994
0079	854-895-54	GROUND STRAP, DTU	ALL	PEC	PAGZZ	1R-W-6150-01-372-3682-A9
1138	2054AS301-01	DRAWER REMOVAL DOLLY ASSY	ALL	PEC	PEGGG	2V-W-3920-01-425-5039
1156	9089T631	BRIDLE SLING	ALL	PEC	PAGZZ	2V-W-3940-01-439-3227
5004	3421AS100-1	OPTICAL READER	ALL	PEC	PEGGD	2V-X-7010-01-399-4339

CASS MAINTENANCE AND HANDLING EQUIPMENT (COMMON)

5003	77/BN	DIGITAL MULTIMETER	ALL	COM	PEOGD	1H-M-6625-01-336-3372-TE
5012	1502COPT03-04	ELECTRIC TEST SET	ALL	COM	PAOGD	7Z-H-6625-01-345-2121
5013	PM3092	OSCILLOSCOPE	ALL	COM	PAOGD	7Z-H-6625-01-397-0543
5015	M266PRD-01	HYDRAULIC LIFT	ALL	COM	PEGGG	6R-D-3920-01-361-5755-SX

UUT SUPPORT EQUIPMENT

5000	000CT001	CABLE SET, UUT POWER	ALL	PEC	PEGGG	2V-W-6150-01-391-5338
------	----------	----------------------	-----	-----	-------	-----------------------

EO+ SUPPORT EQUIPMENT

0135	2047AS273-01	HOIST ASSEMBLY	EO+	PEC	PAGZZ	1R-W-3950-01-375-7680
TBD	TBD	WIRE ROPE ASSEMBLY	EO+	PEC	PAGZZ	TBD
TBD	TBD	RING BOLT	EO+	PEC	PAGZZ	TBD

CASS ANCILLARY EQUIPMENT

1008	2051AS163-05	PNEUMATICS SET	ALL	PEC	PEGGD	2V-X-4920-01-389-8663
5002	85024A-C10	RF PROBE	RF/CNI	PEC	PAGZZ	2V-W-6625-01-390-7702
5008	LA310-AA	DOT MATRIX PRINTER	ALL	COM	PAGBZ	2V-W-7025-01-424-2860
5009	2055AS808-01	VIDEO PATTERN GENERATOR	ALL	PEC	PEGGD	2V-X-6625-01-436-7111
5011	2051AS163-06	RS-485 MANCHESTER HARPOON	ALL	PEC	PEGGD	6R-X-4920-LL-ERD-X323
5018	2055AS815-01	POWER STRIP ASSEMBLY	ALL	COM	AGGGG	1RW-0000-LL-GSE-5562
5020	2056AS137-01	EXTERNAL HARD DISK DRIVE	ALL	COM	PEGGD	6RX-7025-LL-ERE-0622
5021	DC250-01	DICONS 2.5 SOFTWARE (LRIP)	ALL	PEC	MDGZA	2V-D-0000-LL-SWE-4436
5022	DC350-01	DICONS 3.5 SOFTWARE (VECP)	ALL	PEC	MDGZA	2V-D-0000-LL-SWE-4460

*Note: Ancillary equipment is not required for all sites with CASS stations (except for the printer).

APPENDIX “D”

COMMON HAND TOOLS

APPENDIX D. COMMON HAND TOOLS

SOCKETS AND ACCESSORIES

PART NUMBER	NOMENCLATURE	FSCM	NSN	COMMENTS/ACTUAL NAME/ USED WITH
TMXK2	EXT,SKT WR	55719	5120-01-335-1070	2.0" LG,1/4"SQ DR
FX3	EXT,SKT WR	55719	5120-00-243-1689	3.0" LG,3/8"SQ DR
TMXK60	EXT,SKT WR	55719	5120-01-335-1072	6.0" LG,1/4"SQ DR
TMX100	EXT,SKT WR	55719	5120-01-201-9733	10.0" LG,1/4"SQ DR
140124	EXT,SKT WR	0SEL4	5120-01-351-8966	24.0" LG,1/4"SQ DR
F50A	HDL,SKT WR	55719	5120-01-352-1334	SCDR HANDLE,3/8" SQ DR
TM70C	HDL,SKT WR	55719	5120-00-221-7957	RVSBL RCHT,1/4"SQ DR
GF720	HDL,SKT WR	55719	5120-00-240-5364	RVSBL RCHT,3/8"SQ DR
H41H1505-9	HDL,SKT WR	99993	5120-00-230-6385	RVSBL RCHT,1/2"SQ DR
TM4CSA	HDL,SKT WR	55719	5120-01-335-0748	SCDR HDL,1/4" SQ DR,6" O/L
TMS4D	HDL,SKT WR	55719	5120-00-240-1418	SPEEDHANDLE,1/4"SQ DR
TMP01	SKT WR ATCH,SCDR	55719	5120-01-367-3496	#0 PHH,1/4"SQ DR
TMP12A	SKT WR ATCH,SCDR	55719	5120-01-367-3497	#1 PHH,1/4"SQ DR
TMP22A	SKT WR ATCH,SCDR	55719	5120-01-367-3498	#2 PHH,1/4"SQ DR
FP22A	SKT WR ATCH,SCDR	55719	5120-01-069-6905	#2 PHH,3/8"SQ DR
TMC104A	SKT WR ATCH,SCDR	55719	5120-01-367-3499	.033 X 3/16"
TMC105A	SKT WR ATCH,SCDR	55719	5120-01-367-3500	.030 X 1/4"
TMC106A	SKT WR ATCH,SCDR	55719	5120-01-367-3501	.042 X 3/8"
TMA4	SKT WR ATCH,SCDR	55719	5120-01-367-3506	1/8"HEX HEAD,1/4"SQ DR
TMA6	SKT WR ATCH,SCDR	55719	5120-01-367-3489	3/16"HEX HEAD,1/4"SQ DR
FA6A	SKT WR ATCH,SCDR	55719	5120-01-367-3457	3/16"HEX HEAD,3/8"SQ DR
TMA3	SKT WR ATCH,SCDR	55719	5120-01-367-3504	3/32"HEX HEAD,1/4"SQ DR
V8508	SKT WR ATCH,SCDR	95021	5120-00-596-8508	1/4"HEX HEAD,3/8"SQ DR
TMA5	SKT WR ATCH,SCDR	55719	5120-01-367-3488	5/32"HEX HEAD,1/4"SQ DR
FABL5	SKT WR ATCH,SCDR	55719	5120-01-330-1296	5/32"BALLHEX HEAD
TMA3.5	SKT WR ATCH,SCDR	55719	5120-01-367-3505	7/64"HEX HEAD,1/4"SQ DR
FA4.5A	SKT WR ATCH,SCDR	55719	5120-01-367-3455	9/64"HEX HEAD,3/8"SQ DR
VA8602	SKT WR ATCH,SCDR	95021	5120-00-683-8602	5/16"HEX HEAD,3/8"SQ DR
TM05	SKT,SKT WR	55719	5120-01-335-0962	5/32",6 PT,1/4"SQ DR

SOCKETS AND ACCESSORIES CONTINUED

TM6	SKT,SKT WR	55719	5120-01-335-0933	3/16",6 PT,1/4"SQ DR
TM8	SKT,SKT WR	55719	5120-01-335-0935	1/4",6 PT,1/4"SQ DR
STM8	SKT,SKT WR	55719	5120-01-335-0950	1/4",6 PT,D,1/4"SQ DR
STMD10	SKT,SKT WR	55719	5120-01-335-0965	5/16",12 PT,D,1/4"SQ DR
FS101	SKT,SKT WR	55719	5120-01-335-0914	5/16",12 PT,D,3/8"SQ DR
STM11	SKT,SKT WR	55719	5120-01-335-0953	11/32",6 PT,1/4"SQ DR
TM12	SKT,SKT WR	55719	5120-01-335-0939	3/8",6 PT,1/4"SQ DR
STMD12	SKT,SKT WR	55719	5120-01-335-0967	3/8",12 PT,D,1/4"SQ DR
TM14	SKT,SKT WR	55719	5120-01-335-0940	7/16",6 PT,1/4"SQ DR
TMU141	SKT,SKT WR	55719	5120-01-335-0986	7/16"UNIV,12 PT,1/4"SQ DR
STMD16	SKT,SKT WR	55719	5120-01-263-9791	1/2",12 PT,D,1/4"SQ DR
TMU161	SKT,SKT WR	55719	5120-01-335-0987	1/2"UNIV,12 PT,1/4"SQ DR
TM18	SKT,SKT WR	55719	5120-01-335-0942	9/16",6 PT,1/4"SQ DR
TMD18	SKT,SKT WR	55719	5120-01-263-9792	9/16",12 PT,1/4"SQ DR
STMD18	SKT,SKT WR	55719	5120-01-335-0970	9/16",12 PT,D,1/4"SQ DR
S181	SKT,SKT WR	55719	5120-00-935-7446	9/16",12 PT,D,1/2"SQ DR
S241	SKT,SKT WR	55719	5120-00-935-7449	3/4",12 PT,D,1/2"SQ DR
S361	SKT,SKT WR	55719	5120-00-935-7454	1-1/8",12 PT,D,1/2"SQ DR
PIT120	IMPACT DRIVER	55719	5120-01-057-6999	3/8"SQ DR,ROTARY,REVSBLE
TA3	ADPTR,SKT WR	55719	5120-00-224-9219	3/8"SQ DR TO 1/4"SQ DR
TA-1	ADPTR,SKT WR	55719	5120-00-227-8095	1/4"SQ DR TO 3/8" SQ DR

BALL HEXDRIVERS

LN23BP	KEY,SKT HEAD SCREW	96508	5120-01-177-9656	3/32"BALL HEX
5A93H	KEY,SKT HEAD SCREW	2600	5120-00-242-7410	3/32"HEX,L-HANDLE,2"O/A
LN764BP	KEY,SKT HEAD SCREW	96508	5120-00-191-6484	7/64"BALL HEX
LN25BP	KEY,SKT HEAD SCREW	96508	5120-01-182-5022	5/32"BALL HEX
BE5/16	HEXDRVR,BALL,5/16"	78996	5120-01-161-0781	5/16"BALL HEX

SHANK BITS FOR HEX SCREWDRIVERS

HW15	BIT,SCDR	30106	5120-00-957-3653	#0 PHH,1/4"MALE HEX DR
SDM221B	BIT,SCDR	55719	5120-01-355-6226	#1 PHH,1/4"MALE HEX DR
SDM222	BIT,SCDR	55719	5120-00-595-8197	#2 PHH,1/4"MALE HEX DR
XL-17	BIT,SCDR	96508	5120-00-690-7274	1/4" FL BL,1/4"MALE HEX DR
HW-4	BIT,SCDR	30106	5120-00-640-6725	3/32"HEX HEAD
HW-4A	BIT,SCDR	30106	5120-00-921-0574	7/64"HEX HEAD
185-2	BIT,SCDR	3705	5120-00-640-6733	1/8"HEX HEAD
28719-09	BIT,SCDR	30106	5120-01-170-4456	9/64"HEX HEAD
X195-3	BIT,SCDR	3705	5120-00-640-6732	5/32"HEX HEAD
X185-4	BIT,SCDR	3705	5120-00-640-6731	3/16"HEX HEAD

SCREWDRIVERS

SSDEP30B	SCDR (1),CROSS TIP	55719	5120-01-367-3808	#0 PHH, 4" BL
SSDEP31B	SCDR (1),CROSS TIP	55719	5120-01-289-6648	#1 PHH, 3" BL
SDDP101	SCDR (1),CROSS TIP	55719	5120-01-367-3802	#1 PHH,10" BL
SDDP62	SCDR (1),CROSS TIP	55719	5120-01-367-3798	#2 PHH, 6" BL
SDDP63	SCDR (1),CROSS TIP	55719	5120-01-367-3799	#3 PHH, 6" BL
SSDE46B	SCDR (1),FL TIP	55719	5120-01-195-5386	1/8" X .018 TIP WIDTH,6"BL
SSDE66B	SCDR (1),FL TIP	55719	5120-01-133-0022	3/16" X .032 TIP,6-1/8" BL
SSD4	SCDR (1),FL TIP	75347	5120-00-236-2140	1/4" X .020 TIP, 2" BL
SSD6	SCDR (1),FL TIP	55719	5120-01-134-4742	3/8" X .050 TIP
SDD520	SCDR (1),FL TIP	55719	5120-01-367-3725	11/16" X .075 TIP WIDTH
ST012B	SCDR (1),OFFSET	55719	5120-01-367-3758	#1 & #2 PHH, 4-3/4" LG
V01	SCDR (1),OFFSET	79061	5120-00-287-2129	5/32"FL TIP, 3" LG

NUT DRIVERS

ND105	WR (1),SKT	55719	5120-01-335-1003	5/32" NUTDRVR,6-1/2" O/L
ND106	WR (1),SKT	55719	5120-01-335-1004	3/16" NUTDRVR,6-1/2" O/L
ND108	WR (1),SKT	55719	5120-01-335-1006	1/4" NUTDRVR,6-1/2" O/L
ND110	WR (1),SKT	55719	5120-01-335-1008	5/16" NUTDRVR,6-1/2" O/L

PLIERS

94ACP	PLR	55719	5120-01-367-4640	NEEDLE NOSE,27/32" JAW LG
PWC52A	PLR,CABLE	55719	5120-01-370-6693	CONNECTOR PLIERS
E720CG	PLR,DIAG CTG	55719	5110-01-083-9317	SEMI-FLUSH CUT,TAPERED HD
49P	PLR,SLIP JOINT	55719	5120-01-192-3849	9"O/L,W/VINYL GRIPS

TORQUE WRENCHES AND ACCESSORIES

CH150	WR,TRQ	03705	5120-00-427-6021	MICROMETER, 5.0-150 IN-LB
HX122	HEX KEY	03705	5315-01-156-5045	3/16 HEX KEY FOR USE W/ CH-150 TORQUE WRENCH TO SUPPORT EO+ CONSOLE
HX142	HEX KEY	03705	TBD	7/32 HEX KEY FOR USE W/ CH-150 TORQUE WRENCH TO SUPPORT EO+ CONSOLE
HX162	HEX KEY	03705	5315-01-151-7181	1/4 HEX KEY FOR USE W/ CH-150 TORQUE WRENCH TO SUPPORT EO+ CONSOLE
OP102	ADPTR (1),TRQ WR	03705	5120-00-006-9964	5/16" OPEN END
OP112	ADPTR (1),TRQ WR	03705	5120-01-153-0972	11/32" OPEN END
OP142	ADPTR (1),TRQ WR	03705	5120-01-152-8274	7/16" OPEN END
RS-82	WR (1),RCHT	03705	5120-01-046-4953	1/4"SQ DR RVSBL RCHT

CRIMPING TOOLS AND CRIMPING LOCATORS

M22520/2-06	CONT PSNR,TERM CRP	81349	5120-00-017-3809	CONT SIZE: NO.22/22D/22M
M22520/2-08	CONT PSNR, CRIMP TOOL	81349	5120-00-017-3921	CONT SIZE: M24308/10-1,/11-1,/16-1 THRU -5 AND/17-1 THRU -5.
M22520/2-09	CONT PSNR, CRIMP TOOL	81349	5120-00-017-3927	CONT SIZE: M527493-22 & 22M & 22D;MS27494-22 & 22M & 22D; M24308/13-1
M22520/1-01	CRIMP TOOL,TERM,HAN	81349	5120-00-165-3912	
M22520/10-01	CRIMP TOOL,TERM,HAN	81349	5120-00-117-4830	
M22520/2-01	CRIMP TOOL,TERM,HAN	81349	5120-00-165-3910	
M22520-10-100	DIE,CRIMPING TOOL	81349	5120-00-116-3286	CONT NO.10,12 END ITEM:M22520/10-01
M22520/10-101	DIE,CRIMPING TOOL	81349	5120-00-116-2992	DIMPLE CLOSURE 14 THRU 26 AWG.END ITEM M22520/10-01
M22520/5-05	DIE,CRIMPING TOOL	81349	5120-00-133-0577	DOUBLE CLOSURE SIZED 0.178IN. & 0.213 IN. HEX
M22520/1-03	TUR HEAD ASSY	81349	5120-00-016-6554	CONT SIZES 16-20,16-22,&20
M22520/1-04	TUR HEAD ASSY	81349	5120-00-016-7582	CONT SIZES 12-12, 16-16, &20-20

WIRE WRAPPING TOOLS

507100	ADPTR,SLEEVE	24047	5130-00-459-4485	USED W/WIRE WRAP BITS
45-187	STRIPPER,WIRE,HAND	30119	5110-01-090-5870	16 TO 26 AWG TEFLON WIRE
507573	WRAPPING BIT	24047	5120-00-458-7331	USED WITH 14HP1C.
14HP1C	WRAPPING TOOL,WIRE	6X081	5120-00-978-3493	PISTOL GRIP

INSERTION AND REMOVAL TOOLS

M81969/18-01	INSERTER,ELEC CONT	81349	5120-00-930-7504	CONT SIZE: NO. 16 & NO. 20
M81969/39-01	INSERTER,ELEC CONT	81349	5120-00-132-0396	CONT SIZE: 20
M81969/14-03	INSR AND RMVR,ELEC	81349	5120-00-915-4588	CONT SIZE: 16
M81969/14-10	INSR AND RMVR,ELEC	81349	5120-01-330-3822	CONT SIZE: 20: END ITEM MIL-C-55302/68 & 69; MIL- MIL-C-38999; MIL-C-24308 SIZE 22D; MIL-C-83733 SIZE 22D; MIL-T-81714 SIZE 22D
M81969/14-01	INSTALLING AND REMO	81349	5120-00-018-0575	FOR CONNECTORS CONFORMING TO MIL-C- 38999 SIZE 22, 22M, & 22D.
M81969/14-02	INSTALLING AND REMO	81349	5120-00-915-4587	NO. NAS1662-20, NAS1663-20
M81969/14-04	INSTALLING AND REMO	81349	5120-00-157-3138	CONT SIZE: NO. 12
M81969/20-01	REMOVER,ELEC CONT	81349	5120-00-930-7503	CONT SIZE: 16 & 20
S/DEM/1/0060	REMOVAL,ELECTRICAL	50541	5120-01-135-3291	USED FOR 1000 PIN CONNECTR
S/MONT1.0060	INSERTER,ELECTRICAL	50541	5120-01-135-3287	USED FOR 1000 PIN CONNECTR

WRENCHES

V4835	WR (1),OPEN END	95021	5120-00-277-4835	3/16" & 5/32" OPEN END
J1214	WR (1),OPEN END	55719	5120-01-355-1706	3/16" & 7/32" OPEN END
V0810	WR (1),OPEN END	55719	5120-01-084-1010	1/4" & 5/16" OPEN END
S1012	WR (1),OPEN END	55719	5120-00-277-2307	5/16" & 3/8" OPEN END
E26	WR (1),OPEN END	7971	5120-00-277-8313	11/32" & 3/8",OPEN END
J2428	WR (1),OPEN END	55719	5120-01-355-1709	3/8" & 7/16",OPEN END
V01618	WR (1),OPEN END	55719	5120-01-335-1187	1/2" & 9/16" OPEN END
S2224	WR (1),OPEN END	55719	5120-00-277-8299	11/16" & 3/4" OPEN END
V02628	WR (1),OPEN END	55719	5120-01-350-1014	13/16" & 7/8" OPEN END
V03234	WR (1),OPEN END	55719	5120-01-335-1217	1" & 1-1/16" OPEN END
1037A	WR (1),OPEN END	65814	5120-00-142-5357	1/4",12 PT,4-1/2" O/L
OEX100	WRENCH,BOX/OPEN END	55719	5120-00-228-9503	5/16", 12 PT, 4-22/32" O/L
OEX10A	WRENCH,BOX/OPEN END	55719	5120-01-335-1230	5/16", 12 PT, 5-3/4" O/L
OEX110	WRENCH,BOX/OPEN END	55719	5120-00-278-0342	11/32",12 PT, 5" O/L
OEX11	WRENCH,BOX/OPEN END	55719	5120-01-278-1524	11/32",12 PT, 6-1/8" O/L
OEX120	WRENCH,BOX/OPEN END	55719	5120-01-335-1282	3/8",12 PT, 5-1/8" O/L
OEX12A	WRENCH,BOX/OPEN END	55719	5120-01-335-1232	3/8",12 PT, 6-1/2" O/L
OEX14A	WRENCH,BOX/OPEN END	55719	5120-01-335-1233	7/16",12 PT, 7-1/4" O/L
OEX18A	WRENCH,BOX/OPEN END	55719	5120-01-335-1235	9/16",12 PT, 8-3/4" O/L
OEX22A	WRENCH,BOX/OPEN END	55719	5120-01-335-1237	11/16",12 PT,10-1/4" O/L
OEX240	WRENCH,BOX/OPEN END	55719	5120-01-335-1253	3/4",12 PT,7" O/L
OEXM10	WRENCH,BOX/OPEN END	55719	5120-01-349-1438	10mm
OEXM14	WRENCH,BOX/OPEN END	55719	5120-01-349-1442	14mm
A91C	WR,STRAP	55719	5120-00-020-2947	NYLON STRAP, O.090" THK

TORQUE LIMT SCREWDRIVERS

HW-18 28728	ADPTR (1),SKT,WR	30106	5120-01-069-3004	1/4"HEX TO 1/4"SQ.
TS-35	WR,TRQ	30106	5120-01-292-6225	TRQ LMTNG SCDR, 1-36 IN-LB

MISCELLANEOUS

H-B-292	BRUSH,ADHESIVE	81348	7920-00-255-7529 7920-00-252-4084	2" LG BRUSH, .812 DIA
2251	FLASHLIGHT	61637	6230-00-164-6605	
40832	GOGGLES, INDUSTRIAL	2622	4240-01-063-5996	
6966C	HEAT GUN	78976	3439-01-037-7268	1/2" OR SMALLER SHRK TUBNG
MS90387-1	INSTALLING TOOL	96906	5120-00-781-7891	USED FOR MS3368-1 THRU -5 & MS3367-1,-2,-4,-5
GGG-K-494	KNIFE,CRAFTSMAN'S	81348	5110-00-892-5071	
3-LH-16-S	LADDER,SAFETY STEP	1252	5440-00-071-6846	20"W,16"L,56.5"H.3 STEP W/HAND RAILS
GGG-M-350	MIRROR,INSPECTION	81348	5120-01-278-8257	MIR DIA 2.5", 9 - 15" O/L
17P6TYPE1	PULLER,FUSE	99993	5120-00-224-9456	
430C	RULE,STEEL,MACHINIS	3397	5210-00-182-9656	
75E	SCISSORS,ELECTRIANS	66296	5110-00-255-0420	
CSA14	SCRAPER,GASKET	55719	5110-00-177-9526	1-1/2" BL LG
2214	STRAP WRIST	20999	4940-01-302-7963	
GGG-L-211 TY4	LEVEL AND PLUMB	80244	5120-00-516-3356	NONADJUSTABLE BUBBLE LEVEL